SA-Announce Notification System
User Manual Version 7.0.0

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About Syn-Apps

Syn-Apps L.L.C. was founded in 2000 as a consulting firm focused on developing software for IP telephony. Since that time Syn-Apps has more than tripled in size and has expanded its consulting services to include enterprise application development. We believe that our relatively small firm is able to fulfill the needs of our customers more efficiently and inexpensively than our larger competitors.

Syn-Apps has an extensive knowledge base in numerous technologies, including .NET, C#, VB.Net, SQL Server, Java, C++ and other mainstream development tools. Syn-Apps additionally has a strong background in network design and networking fundamentals. We believe this combination of experience in a broad range of technologies allows us to offer our customers an end-to-end application development solution.

We believe that in order to have a successful application deployment one should not only understand the development environment but also understand how the application will interact with the rest of network. Syn-Apps employs one of the Cisco Systems Engineers that was responsible for the network development and design for many Fortune 100 companies. We believe that this enables us to become a valuable asset to any development team.

Syn-Apps developers have a wide variety of development experience in many diverse industries. Our developers have been employed by, or consulted for companies such as Microsoft, Cisco, General Motors, General Dynamics, Bloomberg, and many others. All of our developers have a keen understanding of the software development life cycle and know how to develop successful applications.

At Syn-Apps we understand the importance of a team environment and are comfortable developing and sharing information to ensure that the best of breed product is produced.

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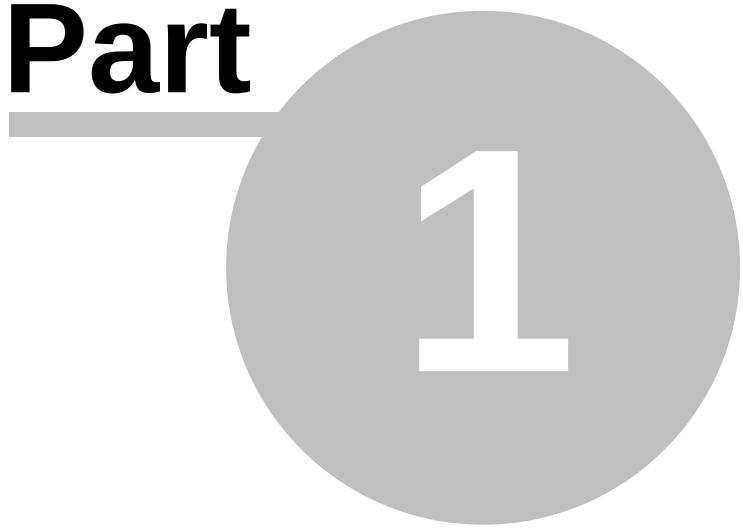
SA-Announce Overview



1 SA-Announce Overview

SA-Announce Notification System [7.0.0]

The SA-Announce Notification System is a feature-rich notification system that couples to Cisco Unified Communications Manager to provide text and audio notifications across an enterprise. The notifications can be real time, such as emergency alerts and live audio notifications (IE paging / intercom), or they can be scheduled via the scheduling system. SA-Announce integrates the phone system with a large number of disparate end points such as Cisco IP Phones, Legacy Overhead Systems, Syn-Apps IP Speakers, Valcom IP Speakers, CyberData IP Speakers, Email, Everbridge (formerly 3n: National Notification Network), Syn-Apps Paging Relay, and Alertus devices.

Notifications can be made by simply picking up the phone and dialing the notification group directory number (as well as other methods such as automated via a relay or web).

The SA-Announce Notification System has numerous audio streaming models that can be used to accommodate almost any notification requirements from one centralized server. With the addition of the Syn-Apps Paging Relay (a unicast to multicast device) even non-multicast enabled wide-area networks can provide notification to all remote sites using one centralized SA-Announce server. Streaming models include Unicast, Server Sourced Multicast, Relay assisted multicast and Phone Sourced Multicast. Note that Valcom and CyberData IP Speakers are multicast only devices.

New features for SA-Announce 7.0.0 include:

- **Dynamic Paging Groups**: IP Phones in a notification group can be assigned using a filter; as you add devices to the system there is no need to manage the notification group.
- **Email Integration**: Emails can be sent automatically when SA-Announce notification groups are activated.
- **CyberData IP Speakers**: Support for the entire suite of CyberData IP Speakers.
- **Everbridge (formerly 3n: National Notification Network)**: Automatically activate Everbridge scenario(s) when a SA-Announce notification group is activated.
- **Alertus**: Automatically activate Alertus Beacon Groups when a SA-Announce notification group is activated.
- **Syn-Apps Paging Relay**: A unicast to multicast hardware device (PoE) that can be used to provide multicast over a non multicast enabled WAN.
- **SA-Announce Web Service**: Automatically activate notification groups and gather information using the SA-Announce web service.
- **Auto Support Ticket Generation**: The prepare report interface will FTP all pertinent log files to Syn-Apps Support and create a ticket via email with the press of a button.
- **Activity Logging**: Notification group activity, schedule activity, text message activity and web interface log in activity are all logged and can be easily viewed in the GUI.
- **Syn-Apps Device Profile**: Syn-Apps has completed the Cisco QED process allowing 0 DLU consumption for CUCM 5, 6, and 7.

New features for SA-Announce 7.0.60 include:

- **Facebook Integration**: Integrate emergency alert and text groups with your Facebook account, this can be useful for delivering campus events to students, etc.
- **Syn-Apps IP Speakers**: SA-Announce now supports Syn-Apps IP Speakers offering plug and play integration.
- **Text Message Enhancement (Polls)**: Polls can now be sent and results can be viewed in real-time.

New features for SA-Announce 7.0.70 include:

- **Weather Alerts**: Integrate emergency alert groups with the National Weather Service and deliver localized weather alerts (Warnings, Watches and Advisories).

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- **Amber Alerts**: Integrate emergency alert groups with the CodeAmber.org to deliver Amber Alerts (abducted children alerts) to configured IP Phones.
- **Background Music Service**: Stream music to your Cisco IP Phones. *A multicast streaming source such as the Syn-Apps paging relay is required.
- **Extension Mobility Support**: SA-Announce now supports extension mobility on CUCM 4/5/6/7+.

New features for SA-Announce 7.0.80 include:

- **Twitter Integration**: Integrate emergency alert groups with Twitter and automatically update your Twitter status when the group is activated.

Coming soon to SA-Announce:

- **Nokia dual mode integration**: Nokia dual mode cell phones as a group end-point (paging to Nokia dual mode phones).
- **SA-Announce iPhone**: An iPhone application that allows users to send text messages and activate/deactivate emergency alert groups.

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The SA-Announce Notification System has been created using ASP.NET 3.5 to provide a rich user interface. Menus and lists that contain multiple items are searchable, simply highlight the menu or list in question and begin to type, the selection indicator will select the first matching item in the list. Tables and grids are sortable by clicking on the column header or the column you wish to sort on. All entries in the GUI are validated on the client side to prevent typographical errors. Tables and grids that can contain thousands of entries use a client side caching model that will allow for good performance without overloading the client or server system.

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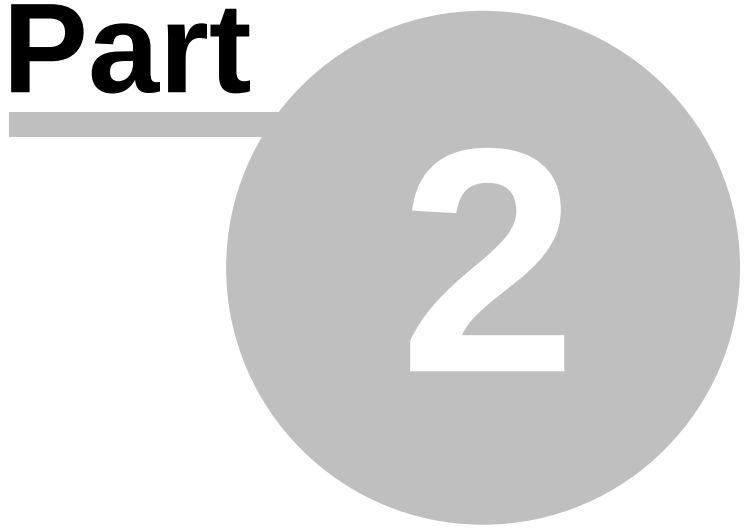
Application Features



2 Application Features

SA-Announce Notification System offers its users a multitude of features.

- Define notification groups of users which you can activate as simply as calling a phone number
- Supports all Cisco XML enabled phones
- Valcom IP speaker SA-Announce supports both version 1 and version 2 of the Valcom IP Speakers
- CyberData IP Speakers – SA-Announce now support the full line of CyberData IP speakers (multicast only)
- Extends existing phone systems to notification systems with minimal installation and management
- Users can access the SA-Announce Notification Suite from any phone on the network (including analog phones)
- SA-Announce monitors active calls and prevents conversations from being interrupted by paging
- Web interface built upon Microsoft .NET allows the user to manage notification groups, send text messages, view current and recent system activity and much more
- Internal voice packet broadcasting service allows the implementation of paging without requiring network multicast configuration if your network is not multicast enabled
- Multicast support
  - Intelligent multicast sourcing: if the phone originating a SA-Announce page is capable (7905, 7912, 7940, 7960), SA-Announce will instruct that phone to broadcast the multicast stream for the page
  - Web Dialer mode allows you to originate multicast paging from any of the supported Cisco phones
- Secure page groups
  - Any SA-Announce page group can be secured with a DTMF security code
- System Information center – View page history, Login history, Scheduled broadcast history, Text history and all relevant system information
- Email integration – SA-Announce now supports email notifications per notification group
- Broadcast Manager – SA-Announce 7 now includes all Broadcast Manager (Scheduled Broadcasts) functionality
- Real Time Activity Monitor – SA-Announce now displays real time notification activity within the web interface
- Enhanced User Management – Create user based access with granular permissions and global administration access
- Message Browser – Sort delivered text messages dynamically based on recipient, date, and message
- Responder Group – Responder group allows you to initiate a 1- to-Many notification with the ability to press a Respond softkey to that turns into 2-way between the caller and the responder
- Emergency Toggle – You now have the ability to enable emergency access on all group types. This bypasses busy detection and plays audio regardless of user state
- Paging Relay – Syn-Apps now provides a hardware solution for non-multicast enabled wide area network links. Use the paging relay to source multicast streams from the local site. Also used for multiple site implementations
- Everbridge – Integrate SA-Announce with Everbridge (formerly 3n: National Notification Network) to allow MASS external notifications like SMS, Text-to-Speech, and E-mail
- Alertus – Alertus beacons are now integrated with SA-Announce providing ADA compliance and a more comprehensive coverage model
- Dynamic Notification Groups – Dynamically associate end points to a page group by Extension, IP Address, Device Pool, Description, Calling Search Space and Name filters
- External Phones Interface – Easily add virtual phones to integrate with overhead paging systems and other external resources

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- Troubleshooting – Automatically create and send relevant data to Syn-Apps via FTP
- Multicast Troubleshooting – Enhanced multicast tests to determined if your network is properly configured
- Emergency Alert notification groups - Define groups for emergency notification (IE school on lockdown / tornado warning / etc)
- Facebook Integration: Integrate emergency alert and text groups with your Facebook account, this can be useful for delivering campus events to students, etc.
- Syn-Apps IP Speakers: SA-Announce now supports Syn-Apps IP Speakers offering plug and play integration.
- Text Message Enhancement (Polls): Polls can now be sent and results can be viewed in real-time.
- Weather Alerts: Integrate emergency alert groups with the National Weather Service and deliver localized weather alerts (Warnings, Watches and Advisories).
- Amber Alerts: Integrate emergency alert groups with the CodeAmber.org to deliver Amber Alerts (abducted children alerts) to configured IP Phones.
- Background Music Service: Stream music to your Cisco IP Phones. *A multicast streaming source such as the Syn-Apps paging relay is required.
- Extension Mobility Support: SA-Announce now supports extension mobility on CUCM 4/5/6/7+.
- Twitter Integration: Integrate emergency alert groups with Twitter and automatically update your Twitter status when the group is activated.

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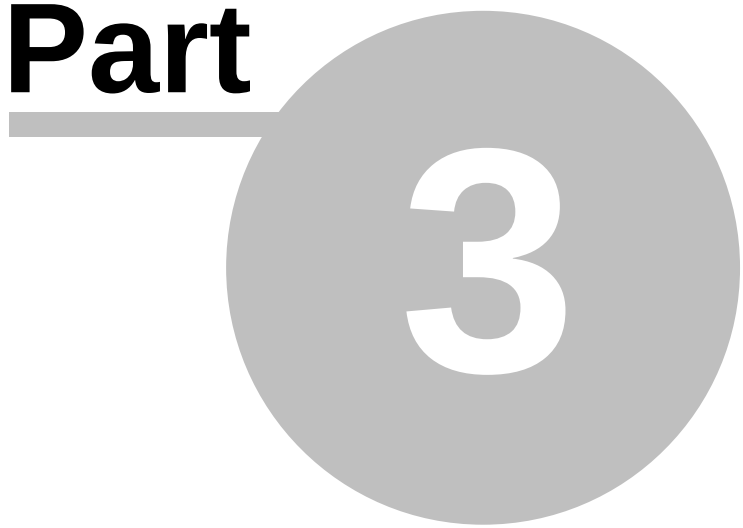
Manual Conventions



3 Manual Conventions

This manual describes installation, configuration, administration and use of the SA-Announce notification system.

Chapters of the manual that refer to the application web administration interface will have the main tab, page and in some cases secondary tab identifier of the web page begin referred to. For example the notification group configuration section refers to the main tab "Groups", page "Create / Edit Groups" and in most cases the secondary tab (e.g. "General"), this would be presented at the top of the manual page being viewed as "**Groups>>Create / Edit Groups: General**".

Bold text is generally used to signify items in the configuration / management interface that need to be or can be configured.

The Notification Group Configuration chapter of the manual describes each of the Create / Edit Groups tabs in detail, other chapters like Creating Emergency alert Groups do not repeat this information.

First time installations should start with the System Requirements chapter and follow the sections through to Notification Group Configuration.

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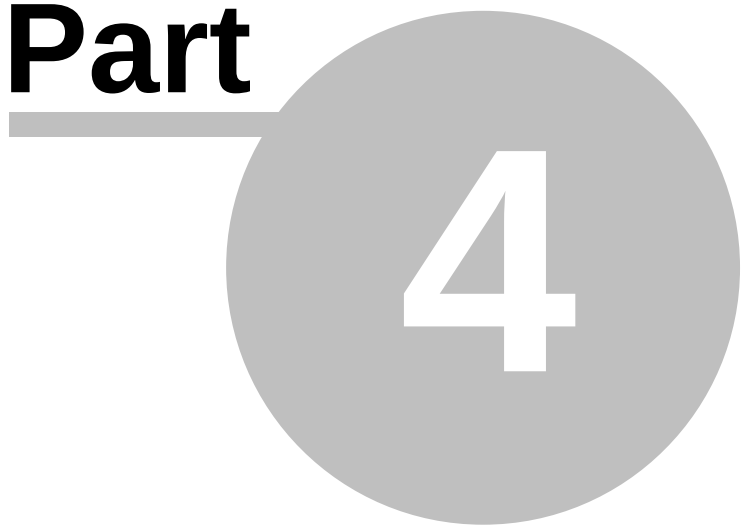
System Requirements



4 System Requirements

In order for SA-Announce to function properly, there are a few system requirements that need to be met.

4.1 Application Server Requirements

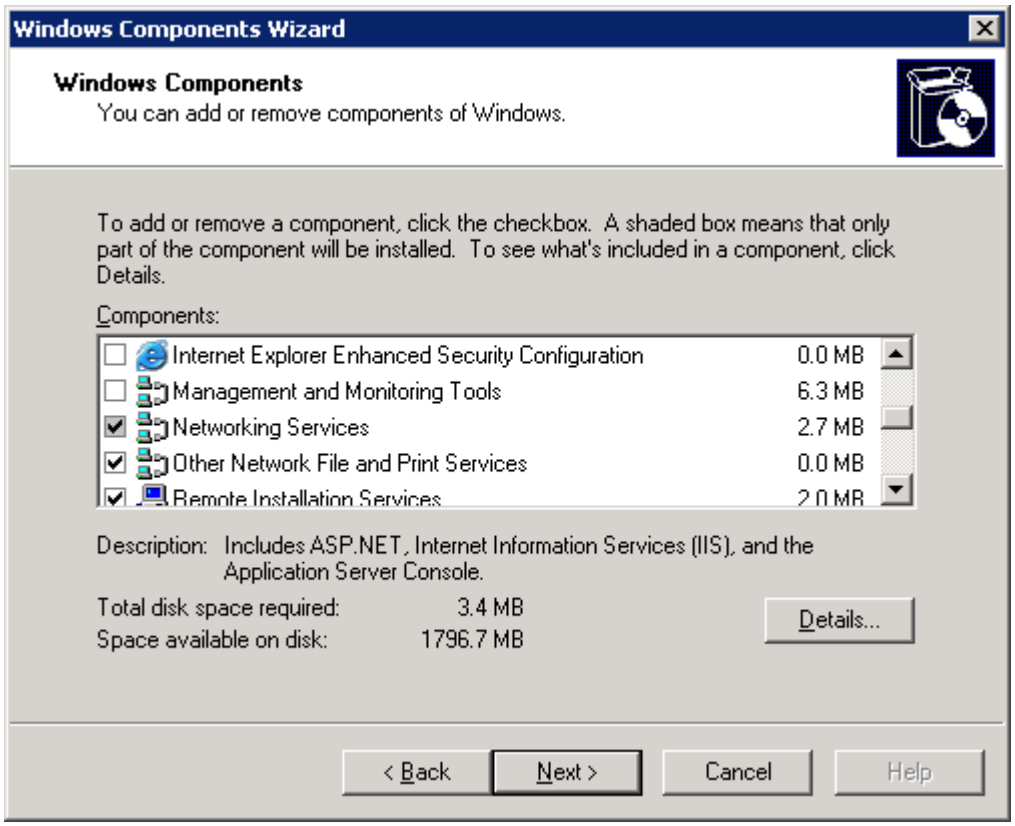
The Server must meet the following requirements:

- Windows 2003 or Windows 2008 (32-bit versions)
- Microsoft .Net 3.5 (URL: http://download.microsoft.com/download/6/0/f/60fc5854-3cb8-4892-b6db-bd4f42510f28/dotnetfx35.exe)
- Microsoft SQL Server 2000 / 2005 or MSDE (URL: http://download.microsoft.com/download/e/a/4/ea4b699b-bec4-4722-96d3-254580ed7f9e/SQLEXPR32.EXE)]
- 2 gigabyte of system memory (minimum requirement)
- 10 gigabytes of hard disk space (minimum requirement)

Windows 2003 / 2008 Server Requirements

Windows Components: Open windows components on the application server (Start>Control Panel>Add Remove Programs>Windows Components).

a. Internet Explorer Enhanced Security Configuration Box must be unchecked.


Windows Components Wizard
Windows Components
You can add or remove components of Windows.
To add or remove a component, click the checkbox. A shaded box means that only part of the component will be installed. To see what's included in a component, click Details.
Components:
Internet Explorer Enhanced Security Configuration 0.0 MB
Management and Monitoring Tools 6.3 MB
Networking Services 2.7 MB
Other Network File and Print Services 0.0 MB
Remote Installation Services 2.0 MB
Description: Includes ASP.NET, Internet Information Services (IIS), and the Application Server Console.
Total disk space required: 3.4 MB
Space available on disk: 1796.7 MB
Details...
< Back
Next >
Cancel
Help

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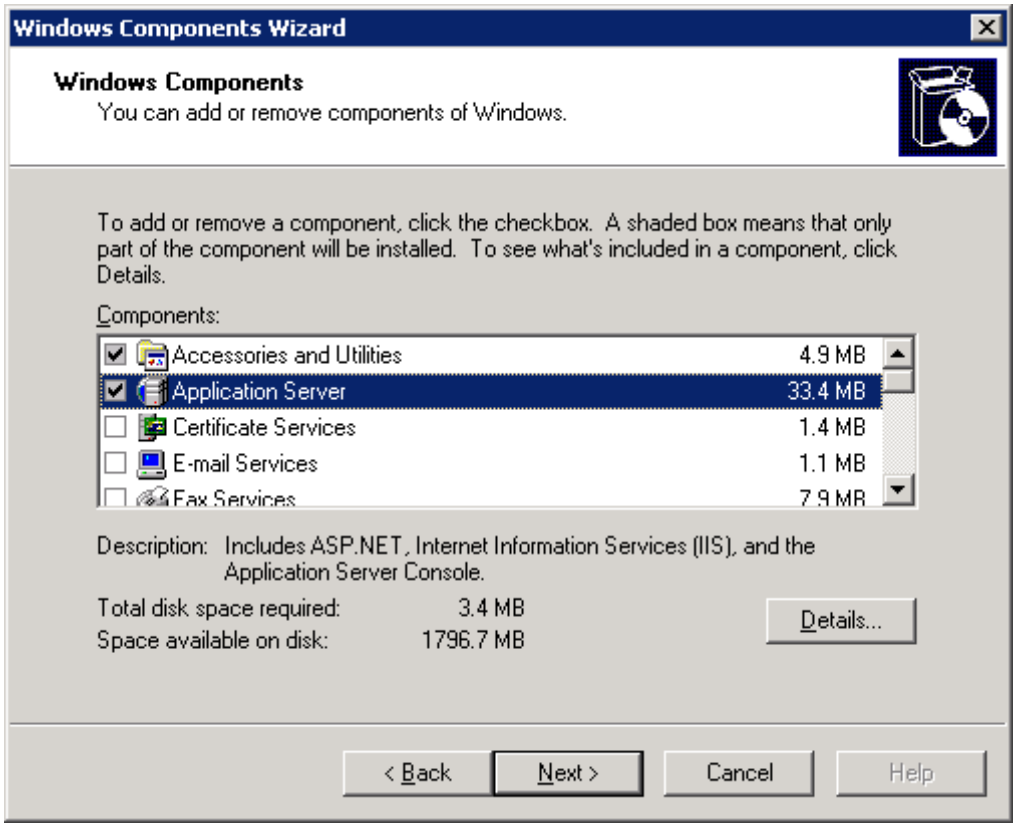
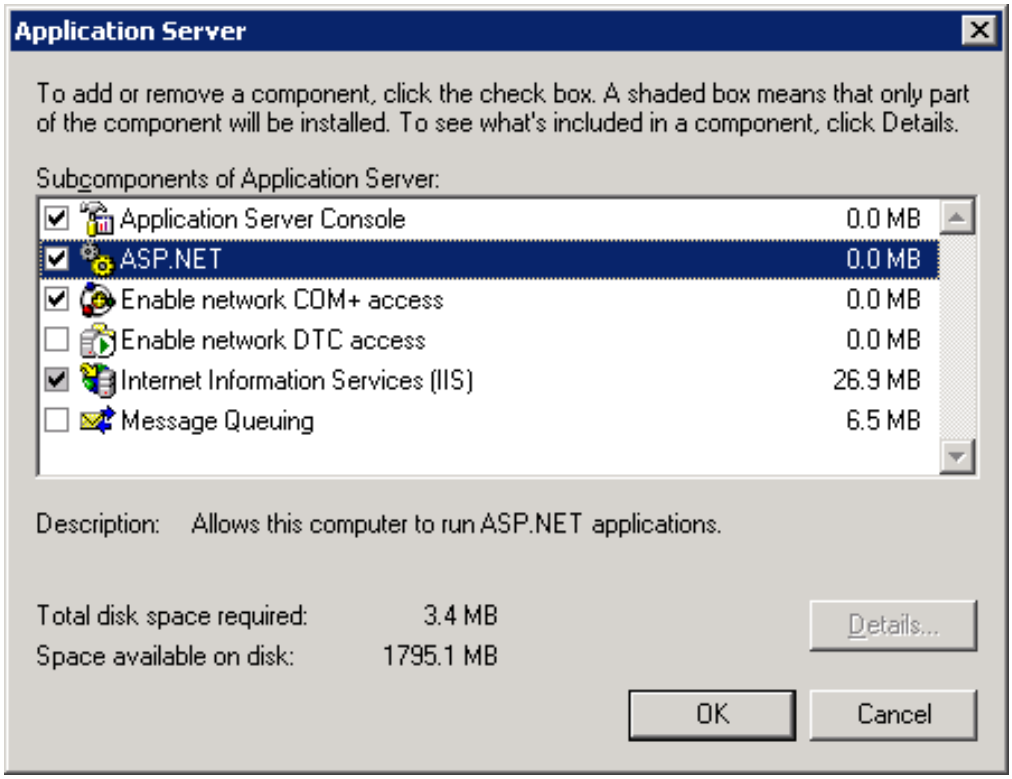
b. Under Application Server the ASP.NET check box must be checked.


Windows Components Wizard
Windows Components
You can add or remove components of Windows.
To add or remove a component, click the checkbox. A shaded box means that only part of the component will be installed. To see what's included in a component, click Details.
Components:
Accessories and Utilities 4.9 MB
Application Server 33.4 MB
Certificate Services 1.4 MB
E-mail Services 1.1 MB
Fax Services 7.9 MB
Description: Includes ASP.NET, Internet Information Services (IIS), and the Application Server Console.
Total disk space required: 3.4 MB
Space available on disk: 1796.7 MB
Details...
< Back
Next >
Cancel
Help


Application Server
To add or remove a component, click the check box. A shaded box means that only part of the component will be installed. To see what's included in a component, click Details.
Subcomponents of Application Server:
Application Server Console 0.0 MB
ASP.NET 0.0 MB
Enable network COM+ access 0.0 MB
Enable network DTC access 0.0 MB
Internet Information Services (IIS) 26.9 MB
Message Queuing 6.5 MB
Description: Allows this computer to run ASP.NET applications.
Total disk space required: 3.4 MB
Space available on disk: 1795.1 MB
Details...
OK
Cancel

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4.2 Cisco Communications Manager Requirements

Cisco Communications Manager Support

- Cisco Communications Manager versions 4.x, 5.x, 6.x, 7.x and Express
- SA-Announce only supports the G.711 audio codec
- Web Access to IP phones cannot be disabled in Communications Manager
- Cisco TSP required if using TAPI busy detection in order to enable TAPI Service Provider
- Proper IP access to Communications Manager and phones required

4.2.1 Communications Manager 3.x

This section is provided for legacy installations, Communications Manager 3.x is no longer supported by Syn-Apps.

If you are using Communications Manager 3.x, you must be logged into the Syn-Apps application server with the same user name and password that exists on the Communications Manager. This must be the local Administrator account and must have the same password as the Administrator account on Communications Manager 3.x.

4.2.2 Communications Manager 4.x, 5.x , 6.x, 7.x

Communications Manager 4.x, 5.x, 6.x or 7.x require setting up the SA-Announce authentication URL.

Please see the Authentication URL section.

Communications Manager(s) must have the Cisco AXL Web Service enabled under Database and Admin Services in Cisco Unified Serviceability.

4.2.2.1 Adding Device Pack (CM 5.x, 6.x, 7.x)

This section is not required.

Use the Syn-Apps device pack to avoid being charged Cisco license units (DLU's) for the virtual devices associated with the notification groups on Cisco Unified Call Manager. By default SA-Announce will add a virtual notification phone for each notification group created, this will consume 2 DLU's becuase the device type used is a 30-VIP. The Syn-Apps device pack will add a new device to the CUCM system. This will allow SA-Announce to add its virtual paging phones as that special Syn-Apps device which consumes 0 DLU's.

To complete the installation two major steps must be completed. First install the Syn-Apps device pack on all Communications Managers in the cluster. After the device pack is successfully installed the CUCMs must be rebooted for the device to become available for use by SA-Announce. The second step is to set SA-Announce to use the new device by altering the registry (see details below).

Note: When SA-Announce is set to use the Syn-Apps device the currently created paging groups will become defunct. The old groups will need to be deleted and new ones created in their place, only create new groups after completing both steps below.

Step 1: Install the COP File: Install the file on all Communications Managers in the cluster.

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* You must download the Syn-Apps Device Package from the the Syn-Apps web site (downloads>Syn-Apps device pack) or from the application cd.

Step 1a At the Cisco Unified OS Administration window, choose **Software Upgrades -> Installation/Upgrade**

Step 1b From the **Source** drop-down list, choose the source for the COP file.

Software Location
Source
DVD/CD or Remote Filesystem

Directory
/ for the root or /path for sub directory

Server
IP Address of the ftp server

User Name

User Password

Transfer Protocol
SFTP or FTP

Step 1c Click **Next**. The **Options/Upgrades** window appears.

Step 1d Choose the COP file from the drop-down list and click **Next**.
The system compiles a checksum value.

Step 1e Click **Save** to accept the checksum value and start installation.
The installation process can take several minutes. An onscreen log reports status of the installation. Once the COP file is installed the CUCM must be rebooted for the device to become available to SA-Announce.

Step 2: Configure SA-Announce to use the Syn-Apps device.

Step 2a On the SA-Announce application server Start>Run>regedit and go to HKLM>Software>Syn-Apps>SA-Announce and edit the value **useSynAppsDevice** to true.

Step 2b Create notification groups as usual, note that any previously existing notification groups are now defunct and will need to be deleted.

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4.2.3 Communications Manager Express

Communications Manager Express requires setting up the SA-Announce authentication URL.

See the Authentication URL section.

You must enable the xml test variable on the CME by typing the following in config mode:
telephony-service
xml test
exit
wr mem

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4.3 Network Requirements

SA-Announce supports both unicast and multicast paging. For systems that will have page groups with more than 100 endpoints, we recommend the use of multicast.

4.3.1 Firewall Ports

Firewall requirements/port usage:

SA-Announce Server to Communications Manager:
Skinny Client Control Protocol (SCCP) TCP: 2000
HTTP/SOAP/AXL TCP: 80, 443, 8443
Real-Time Protocol (RTP) UDP: 20480-32767
TAPI TCP: 2748

SA-Announce Server to IP Phones:
HTTP TCP: 80
Real-Time Protocol (RTP) UDP: 20480-32767
Multicast Real-Time Protocol (RTP) UDP: 20480-32767

IP Phones to SA-Announce Server:
HTTP TCP: 80
Real-Time Protocol (RTP) UDP: 20480-32767
Multicast Real-Time Protocol (RTP) UDP: 20480-32767

You can also refer to the Communications Manager port usage guide and treat Syn-Apps SA-Announce just like a standard IP Phone.

http://www.syn-apps.com/Download.aspx?download_guid=2e52b417-817a-45a8-b88b-fc5140d113f3

4.3.2 Multicast Configuration

If you choose to use multicast (strongly suggested with over 100 phones) you must have a multicast enabled network. All interfaces between the SA-Announce server and the destination phones need to have IP PIM enabled and the switches should have IGMP/CGMP enabled.

If either the network cannot be multicast enabled or enabling multicast would require a large or recurring investment then the Syn-Apps Paging Relay should be deployed at the site to allow SA-Announce to send a single unicast stream over the wan connection and have the Paging Relay convert the stream into a multicast stream at the remote site. See SA-Announce Overview or contact Syn-Apps for more information.

Please refer to Cisco TAC or your Telephony partner for the best approach for implementing multicast on your network.

A Cisco Multicast Quick Start guide can be found at:

http://www.cisco.com/warp/public/105/48.html
or
http://www.syn-apps.com/Download.aspx?download_guid=494b78a5-007b-423a-9110-d4bae6f120b1

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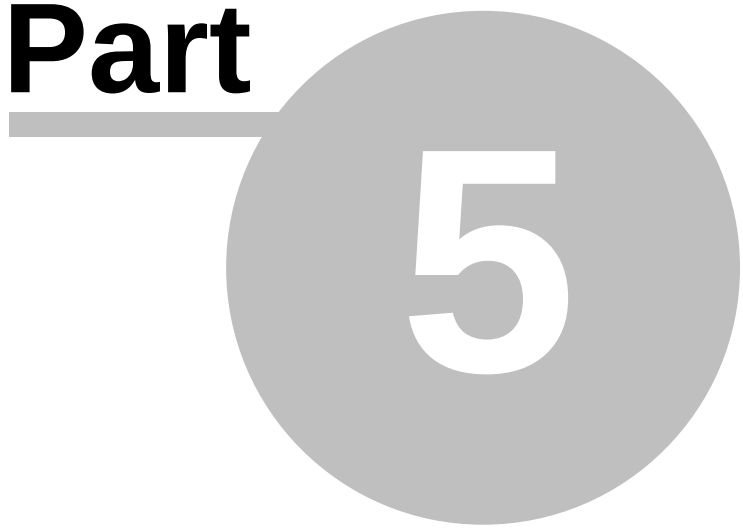
Installation Procedure



5 Installation Procedure

If the application server you are installing SA-Announce on has internet access proceed to the next paragraph. If the application server does not have internet access then please make sure the required components ASP.NET 3.5 and SQL Express 2005 have been installed (see the Application Server Requirements section for the download URLs).

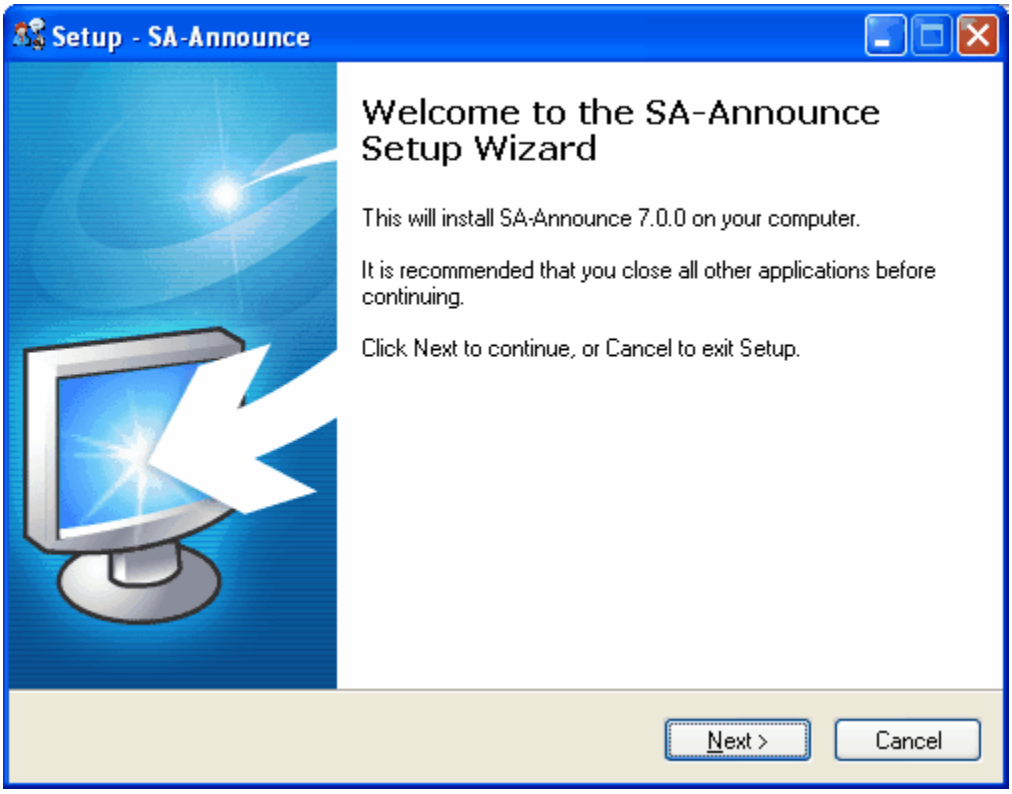
You must be logged onto the application server as an administrator (local or domain) to properly complete the installation.

To begin the installation, place the Syn-Apps application CD into the drive. The Syn-Apps Splash screen will start automatically. Select the **Install Applications** link.

Next, click on the **Install SA-Announce** link from the Syn-Apps application CD.
If you acquired SA-Announce from the Syn-Apps website then start the installation by double clicking the setup program.

If the Install Wizard does not start installation, manually begin installation by:

- Click **Start** off of the Desktop
- Select **Run**
- Type in**: E:\SA-Announce\SA-Announce.exe** (where E: represents your CD drive)


Setup - SA-Announce
Welcome to the SA-Announce Setup Wizard
This will install SA-Announce 7.0.0 on your computer.
It is recommended that you close all other applications before continuing.
Click Next to continue, or Cancel to exit Setup.
Next >
Cancel

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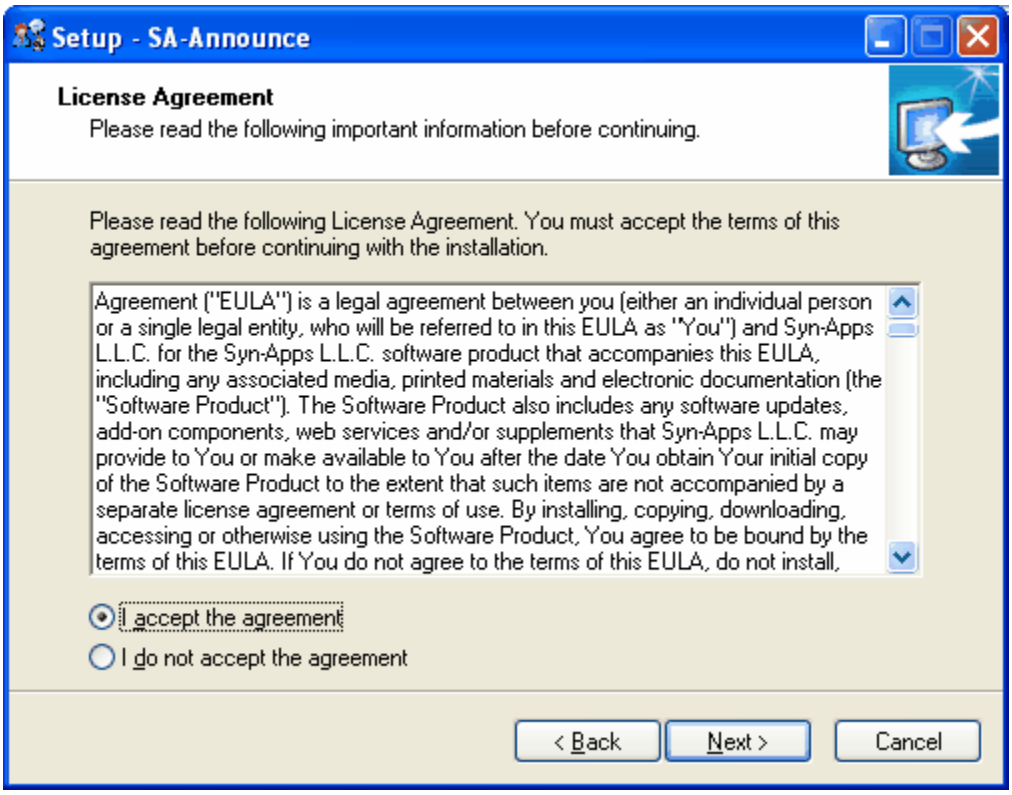
License Agreement

You will be prompted to read your License Agreement to use the Syn-Apps SA-Announce product. You may use your page down key to view by page. Once you agree with the terms, Click **Next** to proceed.


Setup - SA-Announce
License Agreement
Please read the following important information before continuing.
Please read the following License Agreement. You must accept the terms of this agreement before continuing with the installation.
Agreement ("EULA") is a legal agreement between you (either an individual person or a single legal entity, who will be referred to in this EULA as "You") and Syn-Apps L.L.C. for the Syn-Apps L.L.C. software product that accompanies this EULA, including any associated media, printed materials and electronic documentation (the "Software Product"). The Software Product also includes any software updates, add-on components, web services and/or supplements that Syn-Apps L.L.C. may provide to You or make available to You after the date You obtain Your initial copy of the Software Product to the extent that such items are not accompanied by a separate license agreement or terms of use. By installing, copying, downloading, accessing or otherwise using the Software Product, You agree to be bound by the terms of this EULA. If You do not agree to the terms of this EULA, do not install,
I accept the agreement
I do not accept the agreement
< Back
Next >
Cancel

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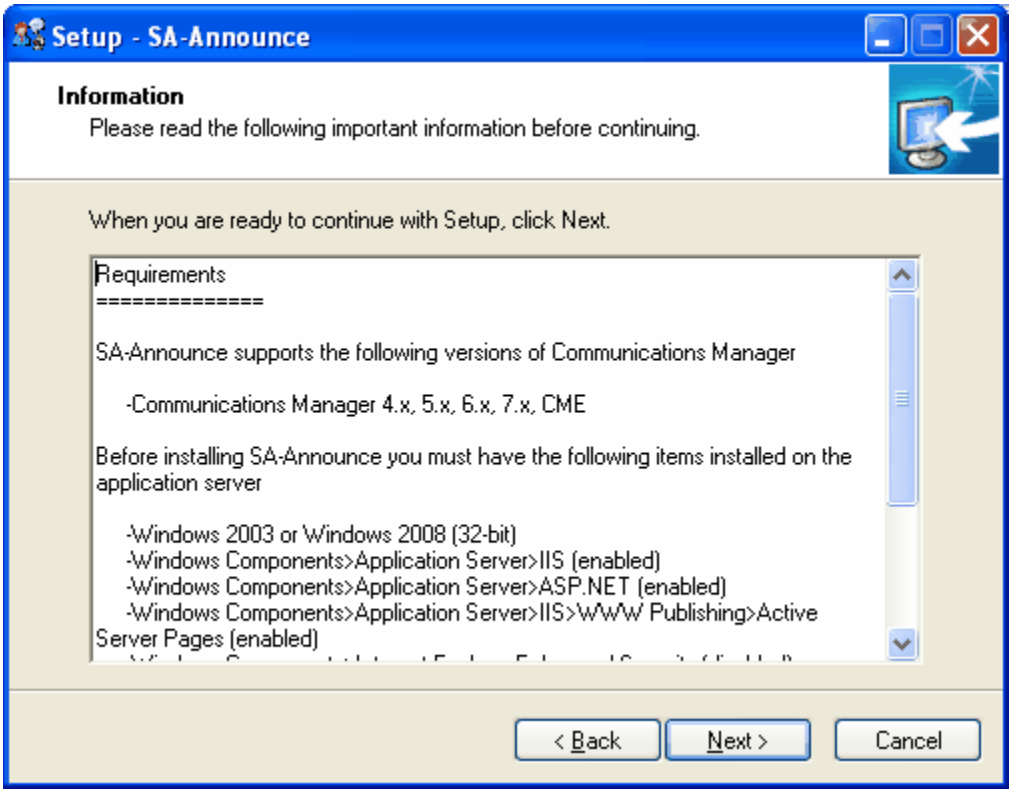
Information

Click **Next** after you have reviewed and verified the software product and version requirements.


Setup - SA-Announce
Information
Please read the following important information before continuing.
When you are ready to continue with Setup, click Next.
Requirements
==========
SA-Announce supports the following versions of Communications Manager
-Communications Manager 4.x, 5.x, 6.x, 7.x, CME
Before installing SA-Announce you must have the following items installed on the application server
-Windows 2003 or Windows 2008 (32-bit)
-Windows Components>Application Server>IIS (enabled)
-Windows Components>Application Server>ASP.NET (enabled)
-Windows Components>Application Server>IIS>WWW Publishing>Active Server Pages (enabled)
< Back
Next >
Cancel

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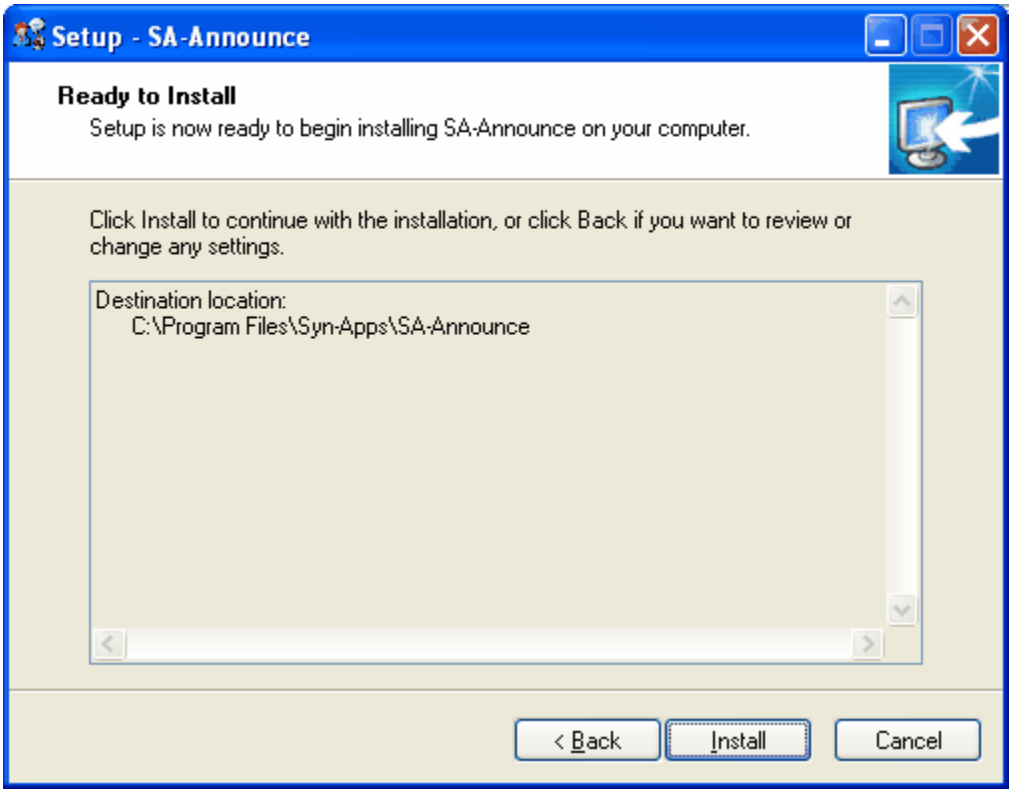
Ready to Install

Click **Install** if you are ready to proceed with the SA-Announce installation.


Setup - SA-Announce
Ready to Install
Setup is now ready to begin installing SA-Announce on your computer.
Click Install to continue with the installation, or click Back if you want to review or change any settings.
Destination location:
C:\Program Files\Syn-Apps\SA-Announce
< Back
Install
Cancel

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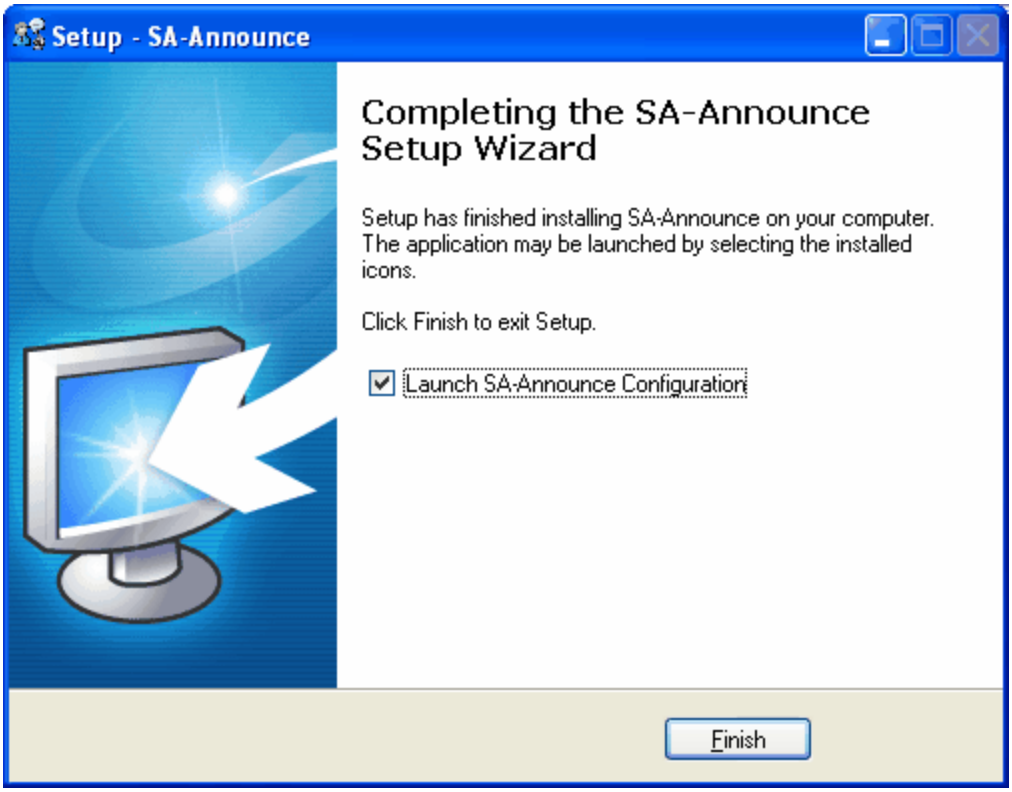
Install Complete


Setup - SA-Announce
Completing the SA-Announce Setup Wizard
Setup has finished installing SA-Announce on your computer. The application may be launched by selecting the installed icons.
Click Finish to exit Setup.
Launch SA-Announce Configuration
Finish

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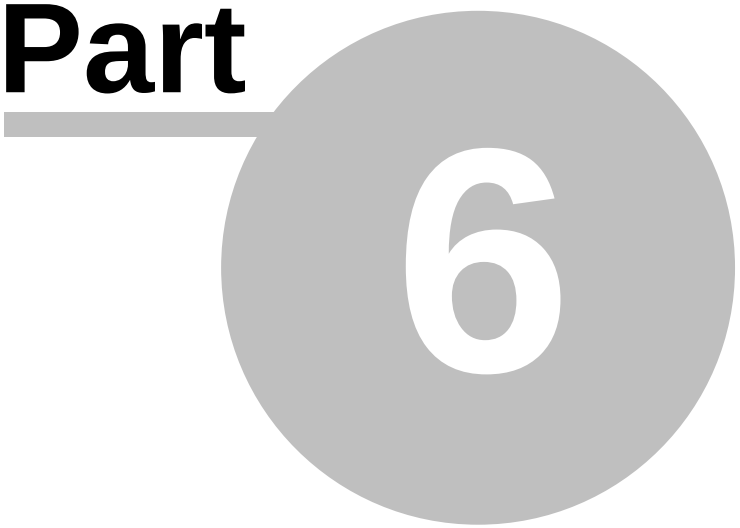
Configuration Utility



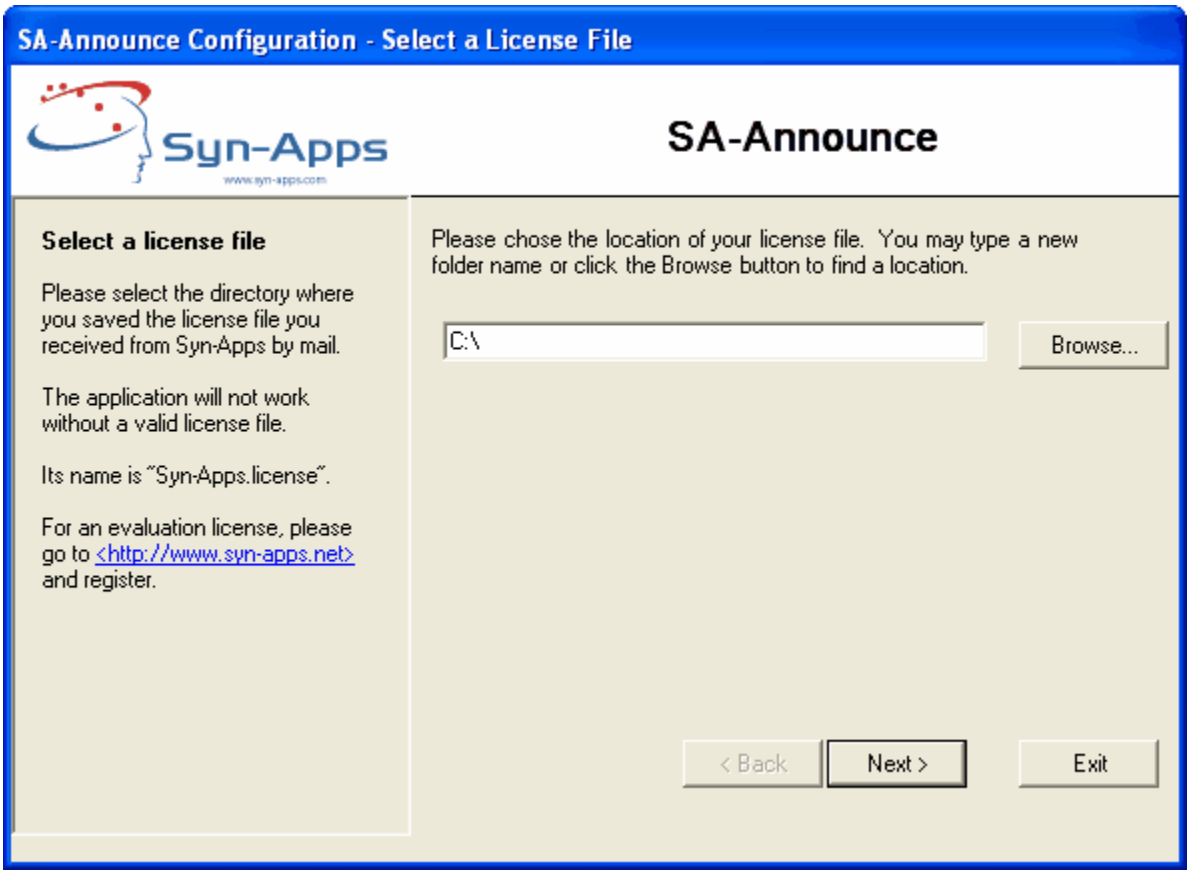
6 Configuration Utility

The following section describes the configuration utility of the SA-Announce notification system. The SA-Announce configuration utility will automatically run at the end of installation. The program can be run on the application server at anytime by going to:

Start>Programs>Syn-Apps>SA-Announce>Configuration.

In order to use the SA-Announce software, a valid license key must be obtained. You can register and obtain product licenses by visiting the Syn-Apps website at www.syn-apps.com. If you have already obtained your key, click **Browse** to locate the license file that you acquired separately. The license file screen will only appear if the license file "Syn-Apps.license" does not exist in the program base directory (C:\Program Files\Syn-Apps\SA-Announce\). If you encounter problems with the browser below simply place your license in the program base directory and make sure it is copied there with the precise filename Syn-Apps.license.

Click **Next** to proceed.


SA-Announce Configuration - Select a License File
Syn-Apps
SA-Announce
Select a license file
Please select the directory where you saved the license file you received from Syn-Apps by mail.
The application will not work without a valid license file.
Its name is "Syn-Apps.license".
For an evaluation license, please go to <http://www.syn-apps.net> and register.
Please chose the location of your license file. You may type a new folder name or click the Browse button to find a location.
C:\
Browse...
< Back
Next >
Exit

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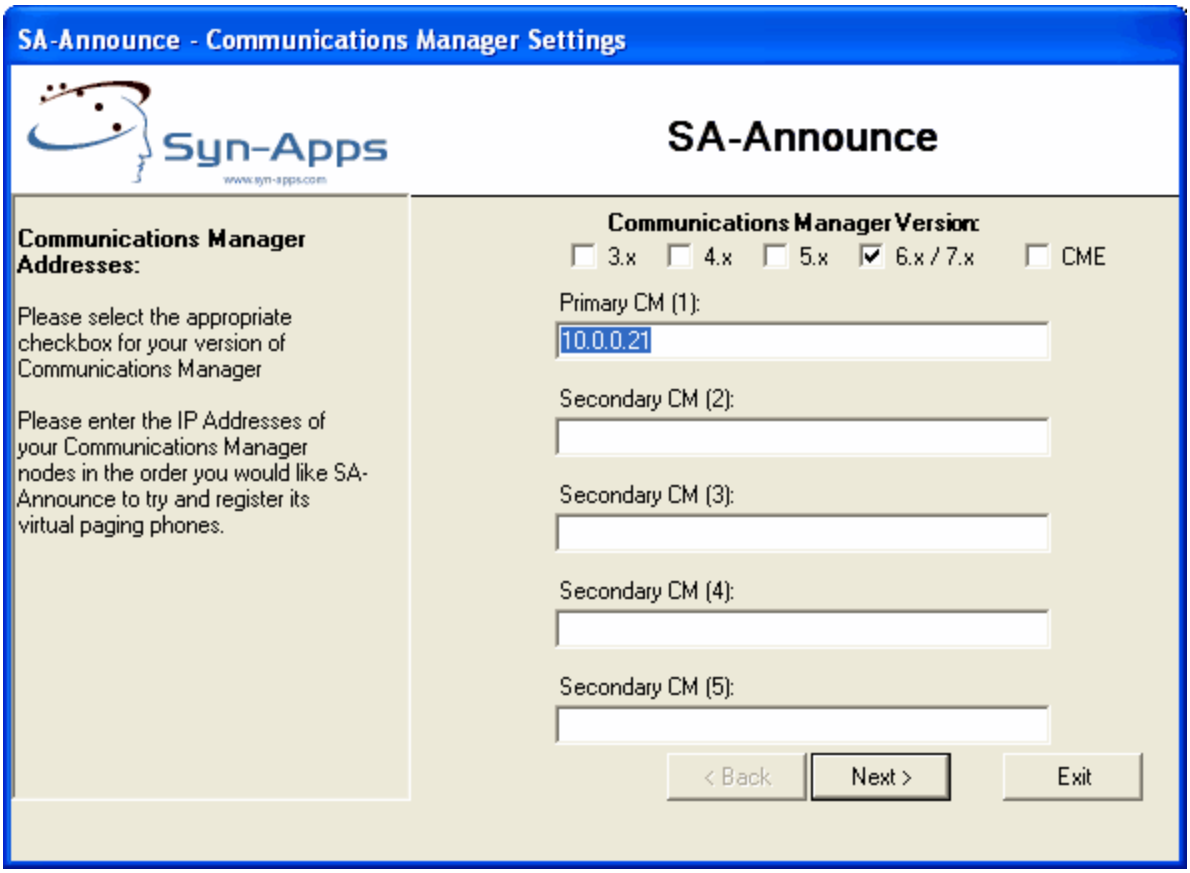
Configuring Communications Manager Settings

Please select the appropriate checkbox for your version of Communications Manager.

Type the IP address of your Communications Manager Server(s). You are allowed to input a maximum of five Communications Manager Servers. The first IP address field populated designates the primary Communications Manager server, if you have multiple Communications Managers on the cluster list the publisher first.

In the event that you wish to designate a secondary Communications Manager for the SA-Announce Notification system to rollover to in case of system failure, you may designate up to 4 back up Communications Manager servers. All servers are required to have the same administrator user ID and password designated and must be running the same version of Communications Manager. Additionally all back-up Communications Manager servers must be using the same SQL SA password.

Click **Next** to proceed.



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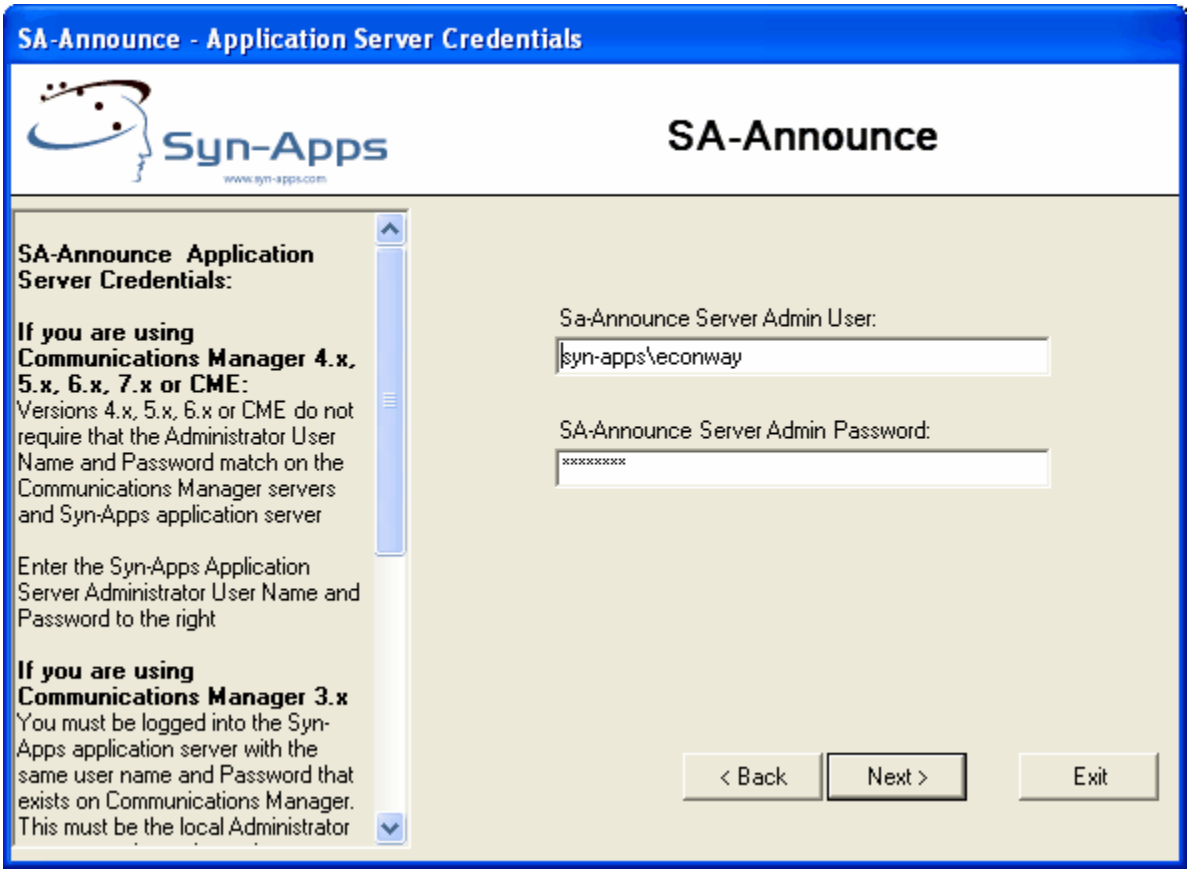
Application Server Credentials

Enter the application server user account credentials. Enter the credentials you are currently logged onto the application server as, this should be an administrator with all privileges.

***Note:** If you are using Communications Manager 3.x, you must be logged into the Syn-Apps application server with the same user name and password that exists on the Communications Manager. This must be the local Administrator account and must have the same password as the Administrator account on Communications Manager 3.x.

Click **Next**


SA-Announce - Application Server Credentials
Syn-Apps
SA-Announce
SA-Announce Application Server Credentials:
If you are using Communications Manager 4.x, 5.x, 6.x, 7.x or CME:
Versions 4.x, 5.x, 6.x or CME do not require that the Administrator User Name and Password match on the Communications Manager servers and Syn-Apps application server
Enter the Syn-Apps Application Server Administrator User Name and Password to the right
If you are using Communications Manager 3.x
You must be logged into the Syn-Apps application server with the same user name and Password that exists on Communications Manager. This must be the local Administrator
Sa-Announce Server Admin User:
syn-apps\econway
SA-Announce Server Admin Password:
****
< Back
Next >
Exit

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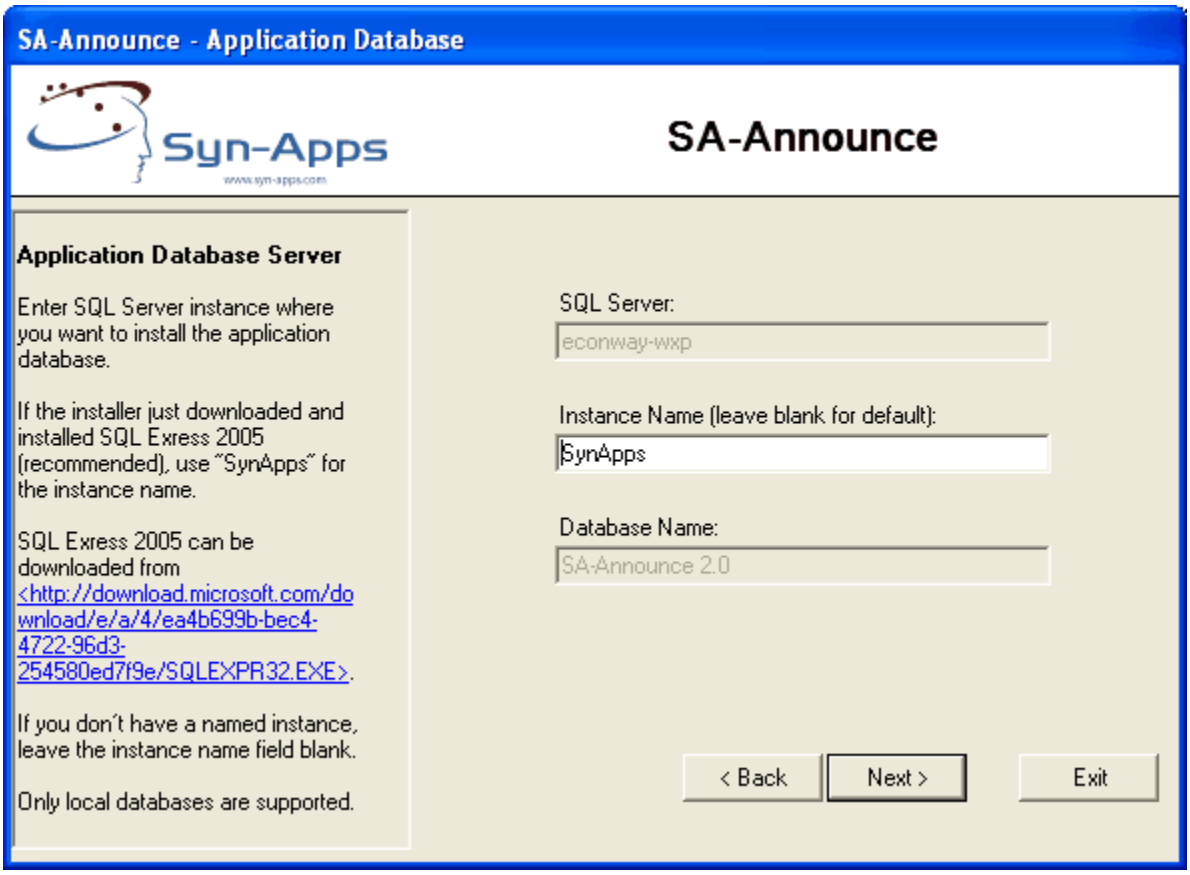
Application Database

If you have previously installed Syn-Apps Core Components or if you installed SQL Express 2005 along with this installation leave the default instance name ***SynApps***. If you are using SQL Server 2000 or 2005 enterprise then blank out the instance name field. Only local databases are supported though remote databases can be used by changing the registry key HKLM>Software>Syn-Apps>SA-Announce>sqlServerName to the name or IP address of the server you would like to use. Trusted authentication is required to use this model (the administrator credentials of the application server and database server machines must match).

Click **Next** to proceed.



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Communications Manager Authentication

Type the Communications Manager user name and password for CCMADMIN access. This user must have access to the Communications Manager AXL interface. This will usually be the same as your application server administrator password. If you have MLA enabled on your Communications Manager this is probably the CCMAdministrator user name.

Click **Next** to proceed.

SA-Announce - Communications Manager Authentication
Syn-Apps
SA-Announce
Communications Manager Authentication
Enter the ccmadmin User Name and Password for the Communications Manager
Common account names include: administrator, ccmadmin, ccmadministrator
This account is used for access to special API URLs of Communications Manager
Communications Manager Admin User:
ccmadministrator
Communications Manager Admin Password:
< Back
Next >
Exit

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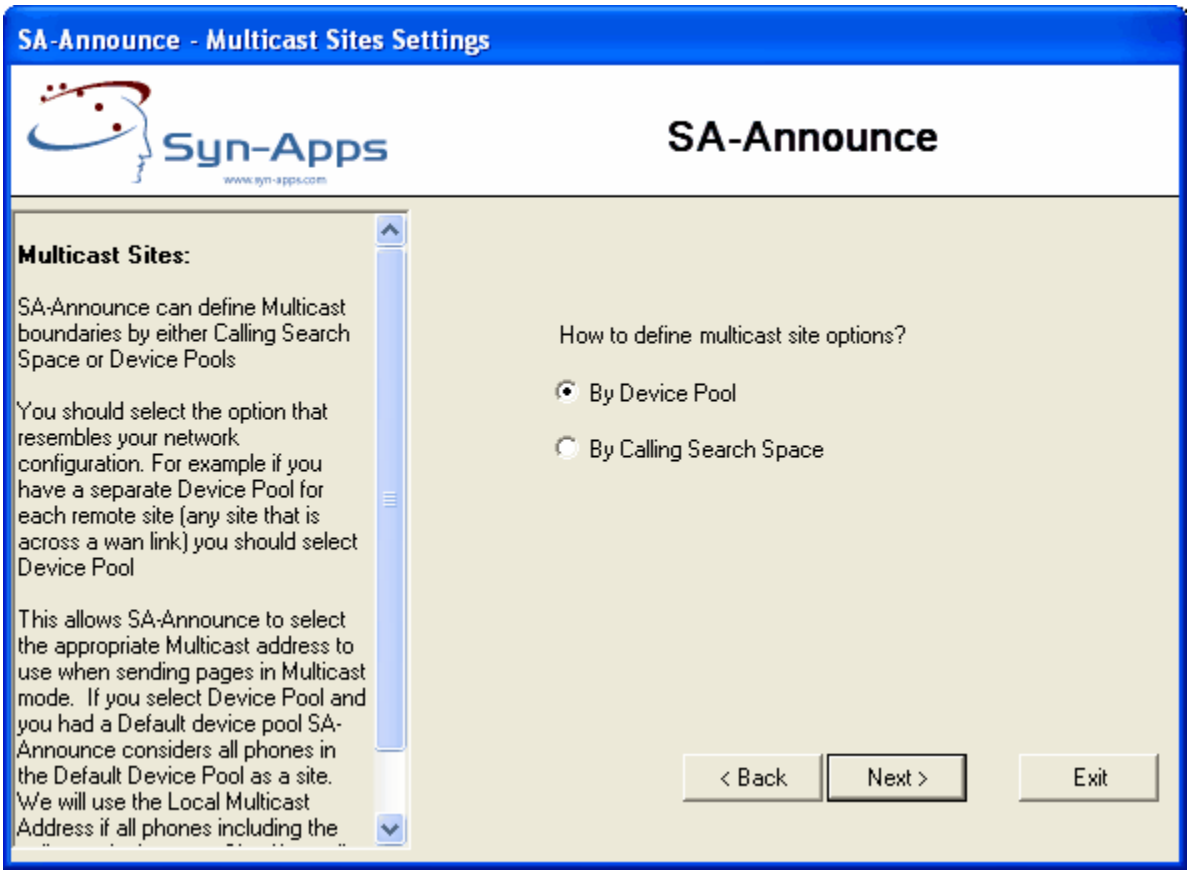
Multicast Sites Settings

The next step is to designate the multicast site options. This will define the way SA-Announce partitions devices into sites to determine which streaming model to use. When you select an option SA-Announce will assume all phones within the Device Pool or Calling Search Space are located at the same site. This is useful for setting up multicast boundaries.

Select **Configure** to continue.


SA-Announce - Multicast Sites Settings
Syn-Apps
SA-Announce
Multicast Sites:
SA-Announce can define Multicast boundaries by either Calling Search Space or Device Pools
You should select the option that resembles your network configuration. For example if you have a separate Device Pool for each remote site (any site that is across a wan link) you should select Device Pool
This allows SA-Announce to select the appropriate Multicast address to use when sending pages in Multicast mode. If you select Device Pool and you had a Default device pool SA-Announce considers all phones in the Default Device Pool as a site. We will use the Local Multicast Address if all phones including the
How to define multicast site options?
By Device Pool
By Calling Search Space
< Back
Next >
Exit

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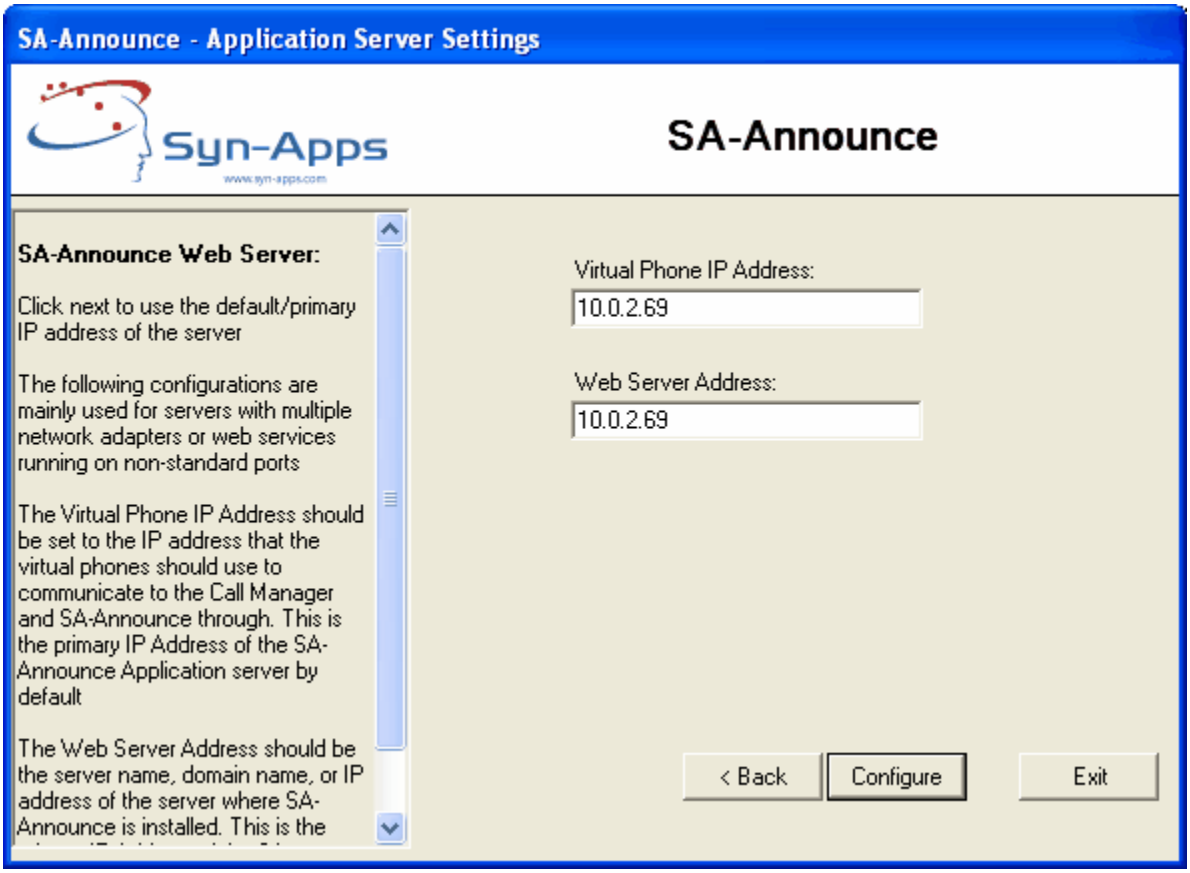
Application Server Settings

Within this step you are able to configure the Virtual Phone IP and Web Server Addresses. These configurations are usually only implemented on servers with multiple network adapters or web services running on non-standard ports. The Virtual Phone IP address is the address the virtual phones use to communicate with the Communications Manager, while the Web Server Address is the server name, domain name, or IP address of the network interface that the SA-Announce web site is running on. By default both of these are the primary IP address of the server.

Select **Configure** to continue.


SA-Announce - Application Server Settings
Syn-Apps
SA-Announce
SA-Announce Web Server:
Click next to use the default/primary IP address of the server
The following configurations are mainly used for servers with multiple network adapters or web services running on non-standard ports
The Virtual Phone IP Address should be set to the IP address that the virtual phones should use to communicate to the Call Manager and SA-Announce through. This is the primary IP Address of the SA-Announce Application server by default
The Web Server Address should be the server name, domain name, or IP address of the server where SA-Announce is installed. This is the
Virtual Phone IP Address:
10.0.2.69
Web Server Address:
10.0.2.69
< Back
Configure
Exit

Configuration Successful

After clicking the Configure button, you will see a series of DOS windows and the status bar will be updated as steps are completed.

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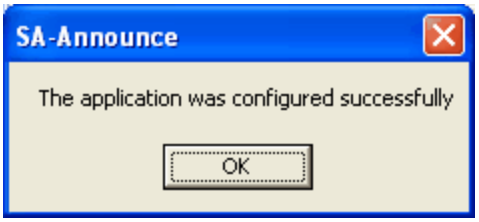
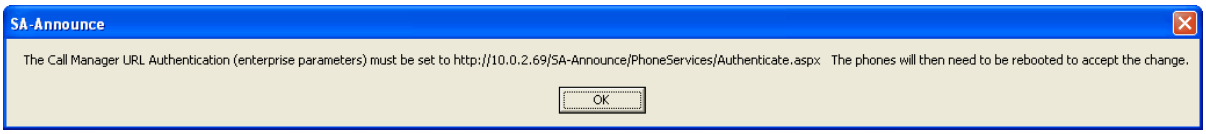
When the application is configured you will see a success window.

Click **OK** to proceed.



Click **OK** to proceed.


SA-Announce
The Call Manager URL Authentication (enterprise parameters) must be set to http://10.0.2.69/SA-Announce/PhoneServices/Authenticate.aspx The phones will then need to be rebooted to accept the change.
OK

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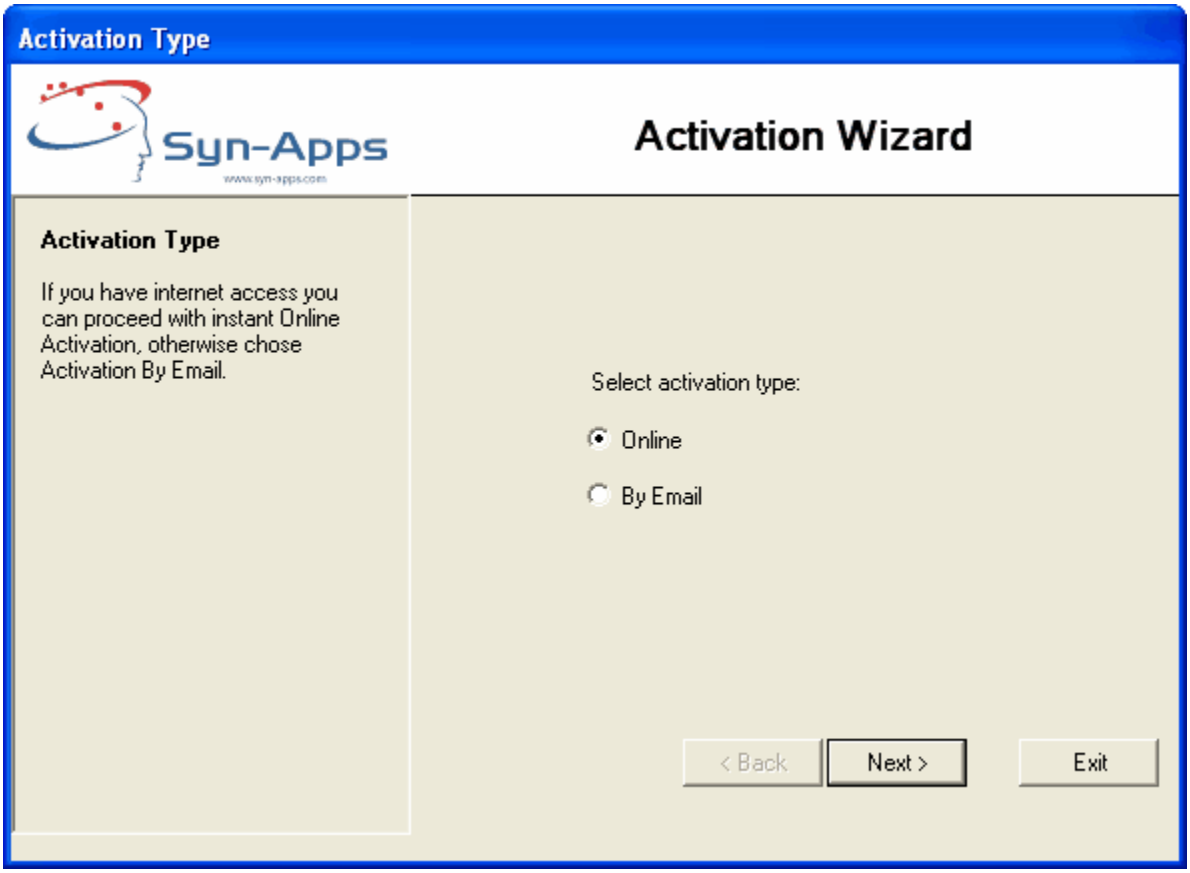
Activation

You are now required to activate your copy of SA-Announce if it has not already been activated. Select **Online** if your SA-Announce server has access to the Internet. Select **By Email** if your SA-Announce server does not have access to the Internet.

Click **Next** to proceed.



Online Activation

If you selected the Online option you will be presented with a success window once your application is activated.

Click **OK** to continue.

Once the Configuration Wizard has completed the installation you will see a shortcut on the desktop labeled **SA-Announce,** use it to access the SA-Announce web administration program. You can also access the SA-Announce administration web pages form any machine on the network, simply browse to http://application-server-ip/SA-Announce.

This completes the SA-Announce Configuration Process. The SA-Announce web page should be displayed automatically. Proceed to the next section to complete the configuration.

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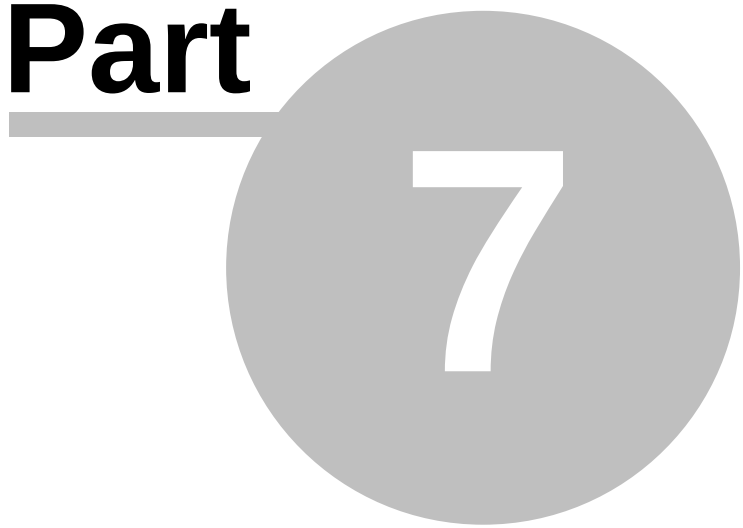
Post Configuration Steps



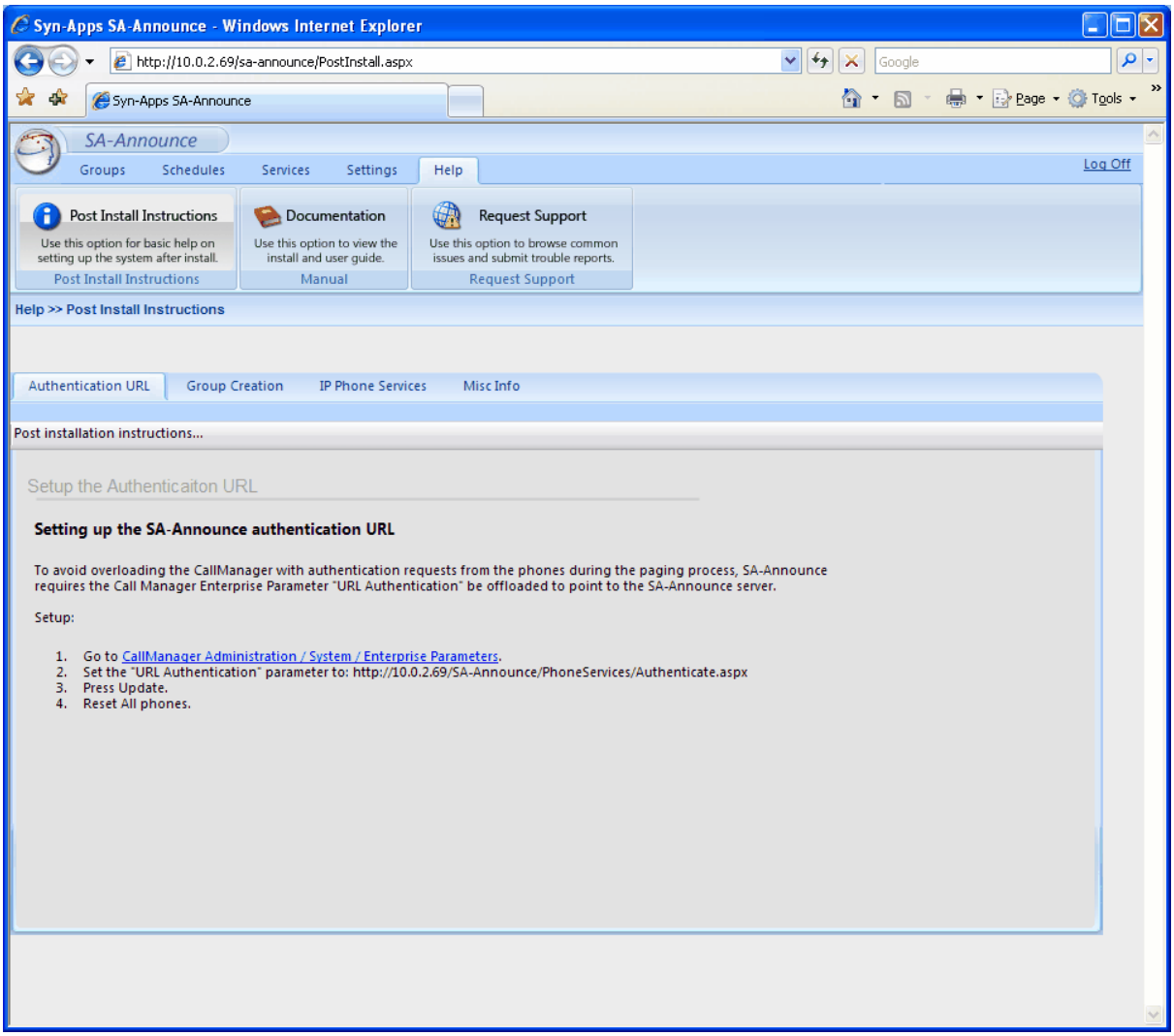
7 Post Configuration Steps

Help>>Post Install Instructions: Authentication URL

Once installation and configuration are completed one manual post-configuration step using Communications Manager administration is required before Cisco IP Phones can be activated by SA-Announce.

Double click on the **SA-Announce shortcut** that was created on your desktop. The **Help>>Post Install Instructions: Authentication URL** page should appear the first time the program is run. To access it at any time, simply click on the tab labeled **Help** at the top of the page and select the Post Install Instructions. Or see the Authentication URL section of the manual for detailed instructions.

The page also contains a quick start guide for setting up groups, a section with instructions for setting up the SA-Announce phone service in Communications Manager (Not Required: this is a phone service that provides a directory of the groups that have been created, one of the most interesting features of SA-Announce is the ability to simply dial the notification group by number), and other information.


Syn-Apps SA-Announce - Windows Internet Explorer
http://10.0.2.69/sa-announce/PostInstall.aspx
Syn-Apps SA-Announce
SA-Announce
Groups
Schedules
Services
Settings
Help
Log Off
Post Install Instructions
Use this option for basic help on setting up the system after install.
Post Install Instructions
Documentation
Use this option to view the install and user guide.
Manual
Request Support
Use this option to browse common issues and submit trouble reports.
Request Support
Help >> Post Install Instructions
Authentication URL
Group Creation
IP Phone Services
Misc Info
Post installation instructions...
Setup the Authenticaiton URL
Setting up the SA-Announce authentication URL
To avoid overloading the CallManager with authentication requests from the phones during the paging process, SA-Announce requires the Call Manager Enterprise Parameter "URL Authentication" be offloaded to point to the SA-Announce server.
Setup:
1. Go to CallManager Administration / System / Enterprise Parameters.
2. Set the "URL Authentication" parameter to: http://10.0.2.69/SA-Announce/PhoneServices/Authenticate.aspx
3. Press Update.
4. Reset All phones.

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7.1 Authentication URL

***Note: For Communications Manager 4.x, 5.x, 6.x or 7.x this step must be completed before continuing.**

Setting up the SA-Announce authentication URL:

To avoid overloading the Communications Manager with authentication requests from the phones during the paging process, SA-Announce requires the Communications Manager Enterprise Parameter "URL Authentication" be offloaded to point to the SA-Announce server.

Setup:
1. Go to Communications Manager Administration: System / Enterprise Parameters.
2. Set the "URL Authentication" parameter to: http://Application Server IP Address/SA-Announce/PhoneServices/Authenticate.aspx
3. Press Update.
4. Reset All phones.

***Note: For Communications Manager Express, this step must be completed before continuing.**

In order for your phones to authenticate properly you must define the authentication URL under the telephony-service.

telephony-service
url authentication http://10.0.3.252/SA-Announce/PhoneServices/Authenticate.aspx
exit
wr mem

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7.2 IP Phone Services

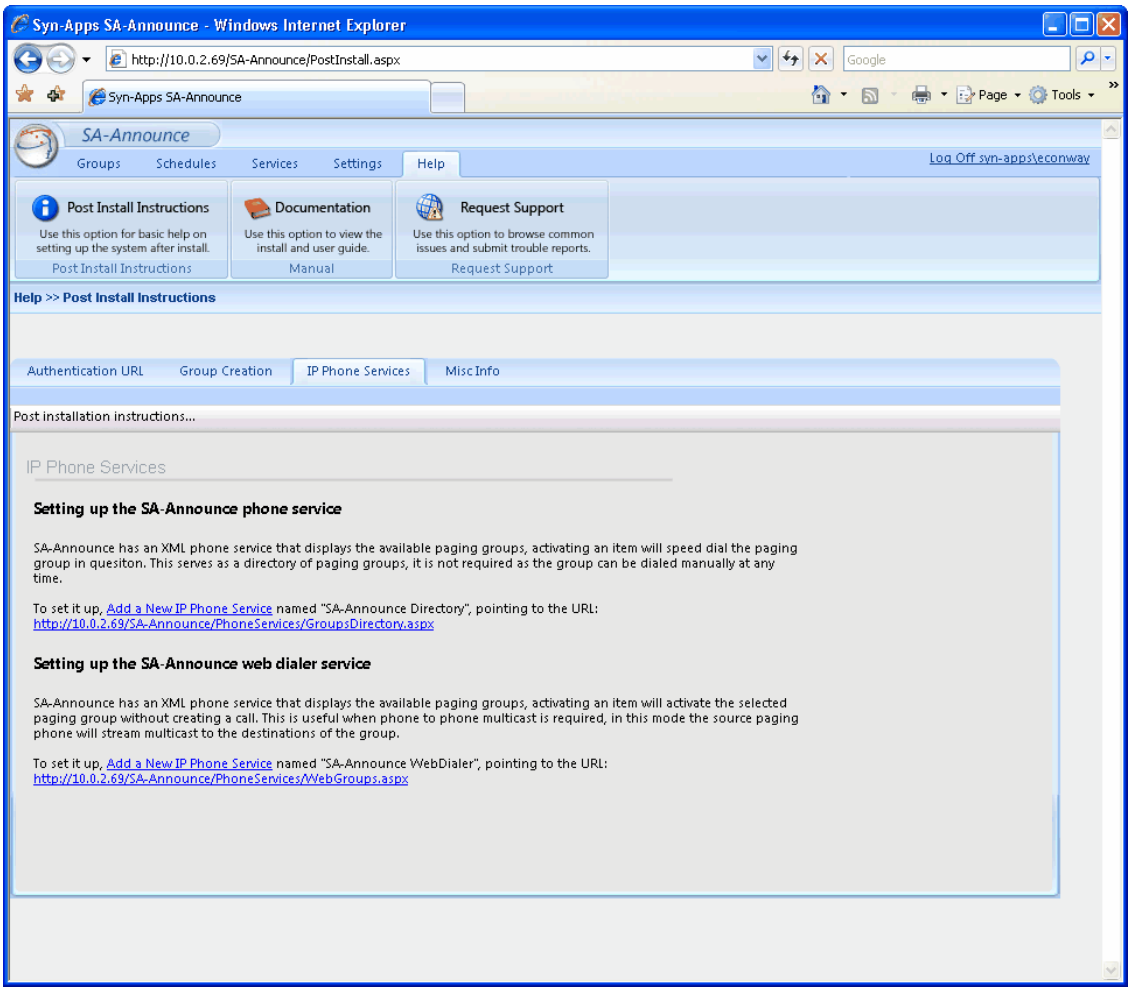
Help>>Post Install Instructions: IP Phone Services

This chapter is not required. The IP Phone Services are not required for operation, skip to the next section unless one of the following is required:

- A directory of groups accessible on the IP Phones (**SA-Announce phone service**).
- Phone sourced multicasting is required (**SA-Announce web dialer service**).

The **SA-Announce phone service** is used to display a directory of configured notification groups on the Cisco IP Phones. To deploy the service, add a new IP Phone Service to CUCM using the Communications Manager administration web pages (Device>>Device Settings>>Phone Services) and add a new phone service with the URL: http://SA-Announce-Server-IP/SA-Announce/PhoneServices/GroupsDirectory.aspx. Once the IP phone service is created, you must subscribe the desired phone(s) to the service from the Device>Phone(details) page. See the chapter Page Group Directory for information on accessing the service.

See Web Dialer Directory for information on setting up the **SA-Announce web dialer** service.


Syn-Apps SA-Announce - Windows Internet Explorer
http://10.0.2.69/SA-Announce/PostInstall.aspx
Syn-Apps SA-Announce
SA-Announce
Groups
Schedules
Services
Settings
Help
Log Off syn-apps\econway
Post Install Instructions
Use this option for basic help on setting up the system after install.
Post Install Instructions
Documentation
Use this option to view the install and user guide.
Manual
Request Support
Use this option to browse common issues and submit trouble reports.
Request Support
Help >> Post Install Instructions
Authentication URL
Group Creation
IP Phone Services
Misc Info
Post installation instructions...
IP Phone Services
Setting up the SA-Announce phone service
SA-Announce has an XML phone service that displays the available paging groups, activating an item will speed dial the paging group in quesiton. This serves as a directory of paging groups, it is not required as the group can be dialed manually at any time.
To set it up, Add a New IP Phone Service named "SA-Announce Directory", pointing to the URL:
http://10.0.2.69/SA-Announce/PhoneServices/GroupsDirectory.aspx
Setting up the SA-Announce web dialer service
SA-Announce has an XML phone service that displays the available paging groups, activating an item will activate the selected paging group without creating a call. This is useful when phone to phone multicast is required, in this mode the source paging phone will stream multicast to the destinations of the group.
To set it up, Add a New IP Phone Service named "SA-Announce WebDialer", pointing to the URL:
http://10.0.2.69/SA-Announce/PhoneServices/WebGroups.aspx

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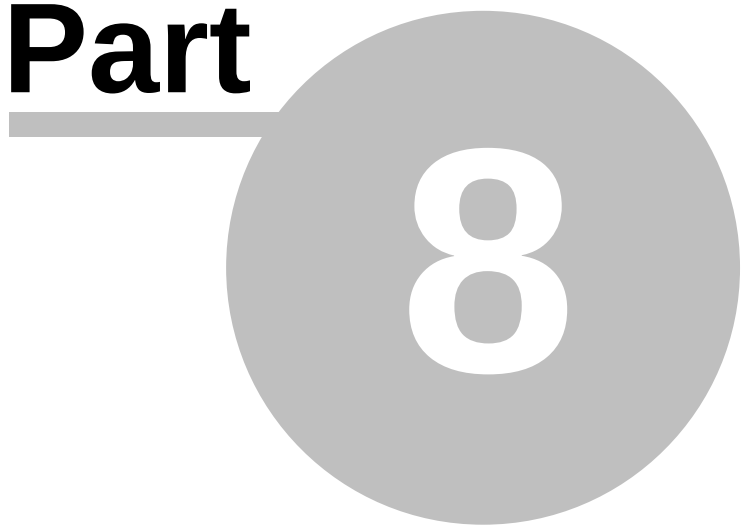
Initial Application Configuration

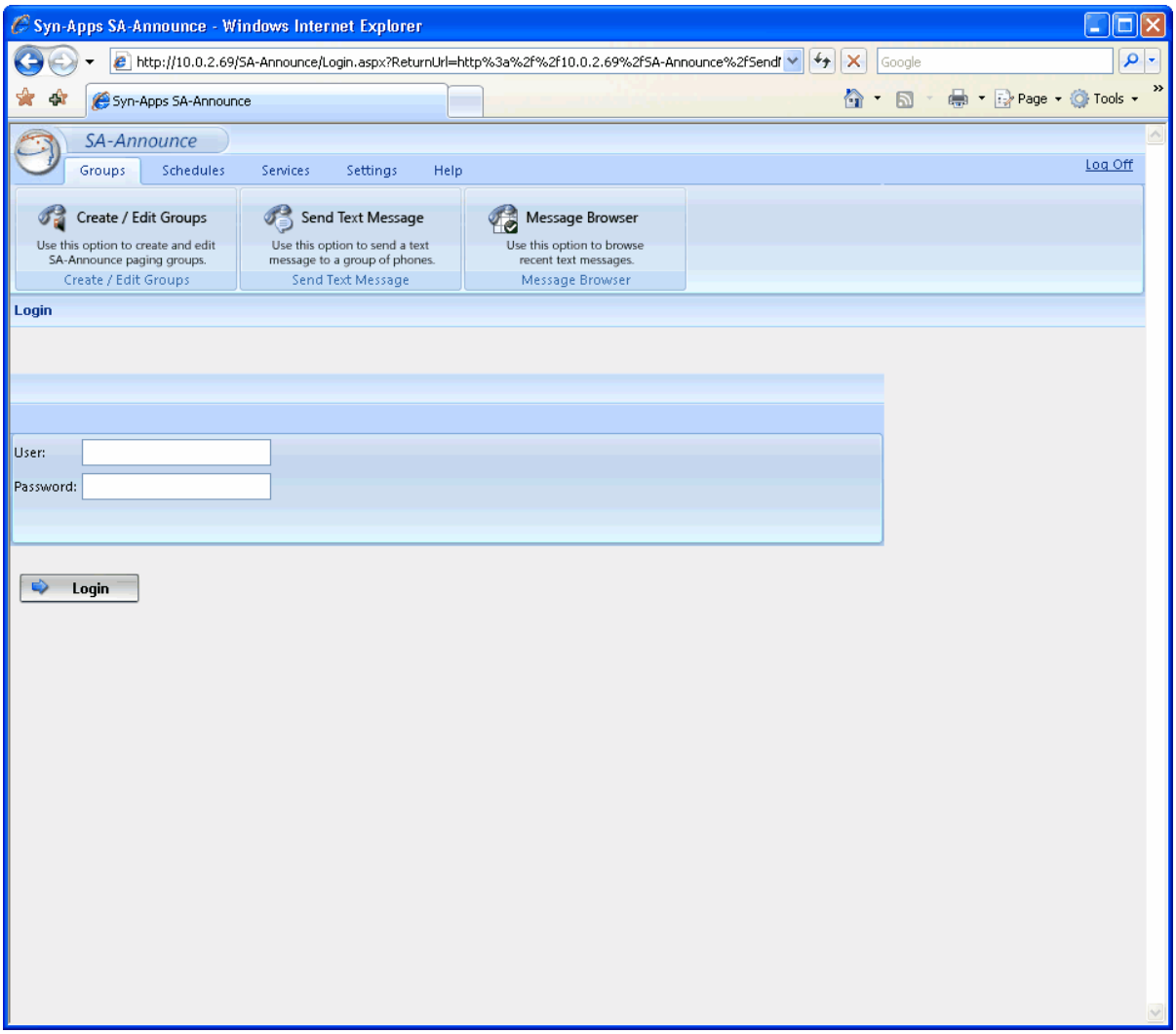


8 Initial Application Configuration

This section describes the basic settings in the SA-Announce notification system that should be understood for all installations.

8.1 First Time Login

After starting the application (or browsing away from the post installation page if it's the first time the program has run) you will be prompted to enter your application password before SA-Announce allows access to the application. Your default user name and password are the same as the Local Machine administrator account you used in configuration. Enter your user name password and click the **Login** button.



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8.2 Service Configuration Options

Services>>Broadcast Services: Settings

The **Settings Tab** contains the following service parameters:

- **Confirmation threshold when calling a broadcaster group**
  - This setting is used to determine when the originator of the page hears confirmation beeps which alert the user that it is safe to start talking. The default setting is 80%, so if a page group had 100 phones we would play the tones when 80 phones are activated.
- **Busy Detection**
  - To prevent pages from interrupting phones that are on active calls, XML Busy Detection is enabled by default. Some scenarios require TAPI busy detection. Please refer to the Configuring TAPI Busy Detection chapter for detailed setup instructions.
- **Application Server Site**
  - Select the site that the SA-Announce server resides at (so the broadcaster can determine a local broadcast versus a inter-site broadcast).
- **Servers authorized to use the SA-Announce API**
  - Enter the IP Addresses of servers authorized to access the SA-Announce API (comma delimited list).
- **Automatic Restart Service**
  - Enabling this option will automatically restart the SA-Announce service when changes are made to your groups.
- **Page group busy if External Phone busy**
  - When enabled, SA-Announce will notify the page originator that the external destination (IE analog paging system) is busy, and the page will end.
- **SA-DND in Use**
  - Check when you are using SA-DND Do Not Disturb or another ringer management system and destinations with disabled ringers will not be paged. If this option is selected the automatic refresh timer setting will need to be changed, at two hours by default it would take SA-Announce an hour (average) to discover that a ringer had been turned off. To change the setting regedit: HKLM>Software>Syn-Apps>SA-Announce>refreshPhoneSettingsMinutes and change the value to a minimum of 2 (installations under 500 phones), 4 (installations with 501-1500 phones), 5-10 (installations with over 1501 phones).
- **Idle URL in Use**
  - Check when you are using the Idle URL feature on the Cisco IP Phones, this will clear the phone state prior to trying to page and avoid the xml busy state that the Idle URL creates.
- **All Busy Detect**
  - If checked, you will be notified if all destinations of the group are busy.
- **Extension Mobility Mode Enable**
  - For use with CUCM 5/6/7+ systems using extension mobility. Using this option will reveal user device profiles in the Groups>IP Phones section which can then be added to groups.
- **Multicast Server Mode**
  - For use with nearly all Cisco phones running recent firmware, when checked the server will source multicast rather than the source paging phone.

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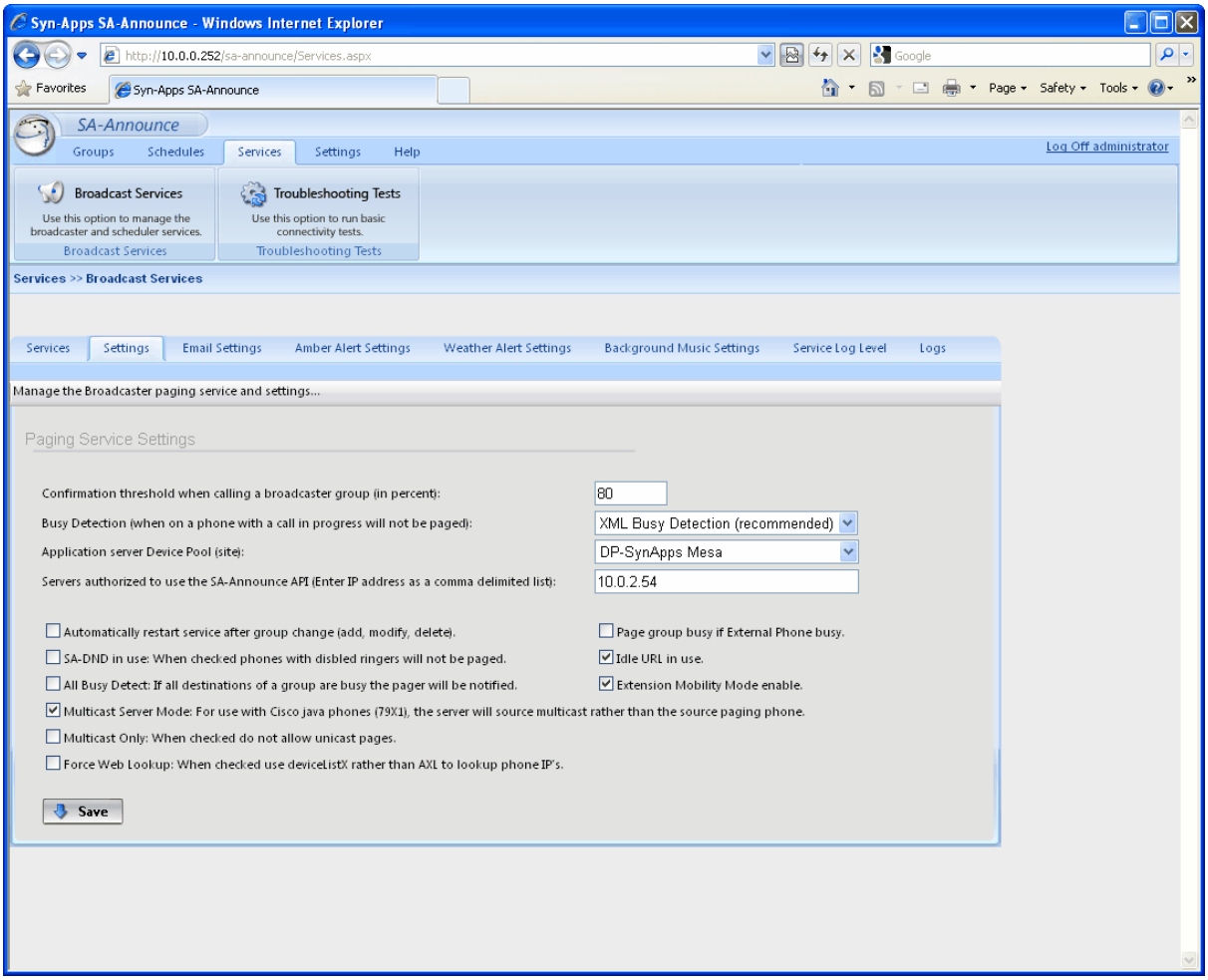
- **Multicast Only**
  - When checked do not allow unicast notifications. A useful setting when phone sourced multicast was the default streaming model, with the newer server sourced model the broadcaster does not need to fail over to unicast when a non Cisco phone dials a live notification group.
- **Force Web Lookup** (for use with Communications Manager 3.x and 4.x only)
  - When checked use deviceListX rather than the AXL API to lookup phone IP's. This setting is only applied for CM version 4.
  - Only enable this option when requested by Syn-Apps Support

Settings Tab Page


Syn-Apps SA-Announce - Windows Internet Explorer
http://10.0.0.252/sa-announce/Services.aspx
Favorites
Syn-Apps SA-Announce
Page
Safety
Tools
SA-Announce
Groups
Schedules
Services
Settings
Help
Log Off administrator
Broadcast Services
Use this option to manage the broadcaster and scheduler services.
Broadcast Services
Troubleshooting Tests
Use this option to run basic connectivity tests.
Troubleshooting Tests
Services >> Broadcast Services
Services
Settings
Email Settings
Amber Alert Settings
Weather Alert Settings
Background Music Settings
Service Log Level
Logs
Manage the Broadcaster paging service and settings...
Paging Service Settings
Confirmation threshold when calling a broadcaster group (in percent):
80
Busy Detection (when on a phone with a call in progress will not be paged):
XML Busy Detection (recommended)
Application server Device Pool (site):
DP-SynApps Mesa
Servers authorized to use the SA-Announce API (Enter IP address as a comma delimited list):
10.0.2.54
Automatically restart service after group change (add, modify, delete).
SA-DND in use: When checked phones with disbled ringers will not be paged.
All Busy Detect: If all destinations of a group are busy the pager will be notified.
Multicast Server Mode: For use with Cisco java phones (79X1), the server will source multicast rather than the source paging phone.
Multicast Only: When checked do not allow unicast pages.
Force Web Lookup: When checked use deviceListX rather than AXL to lookup phone IP's.
Page group busy if External Phone busy.
Idle URL in use.
Extension Mobility Mode enable.
Save

Click the **Save** button to save settings changes.

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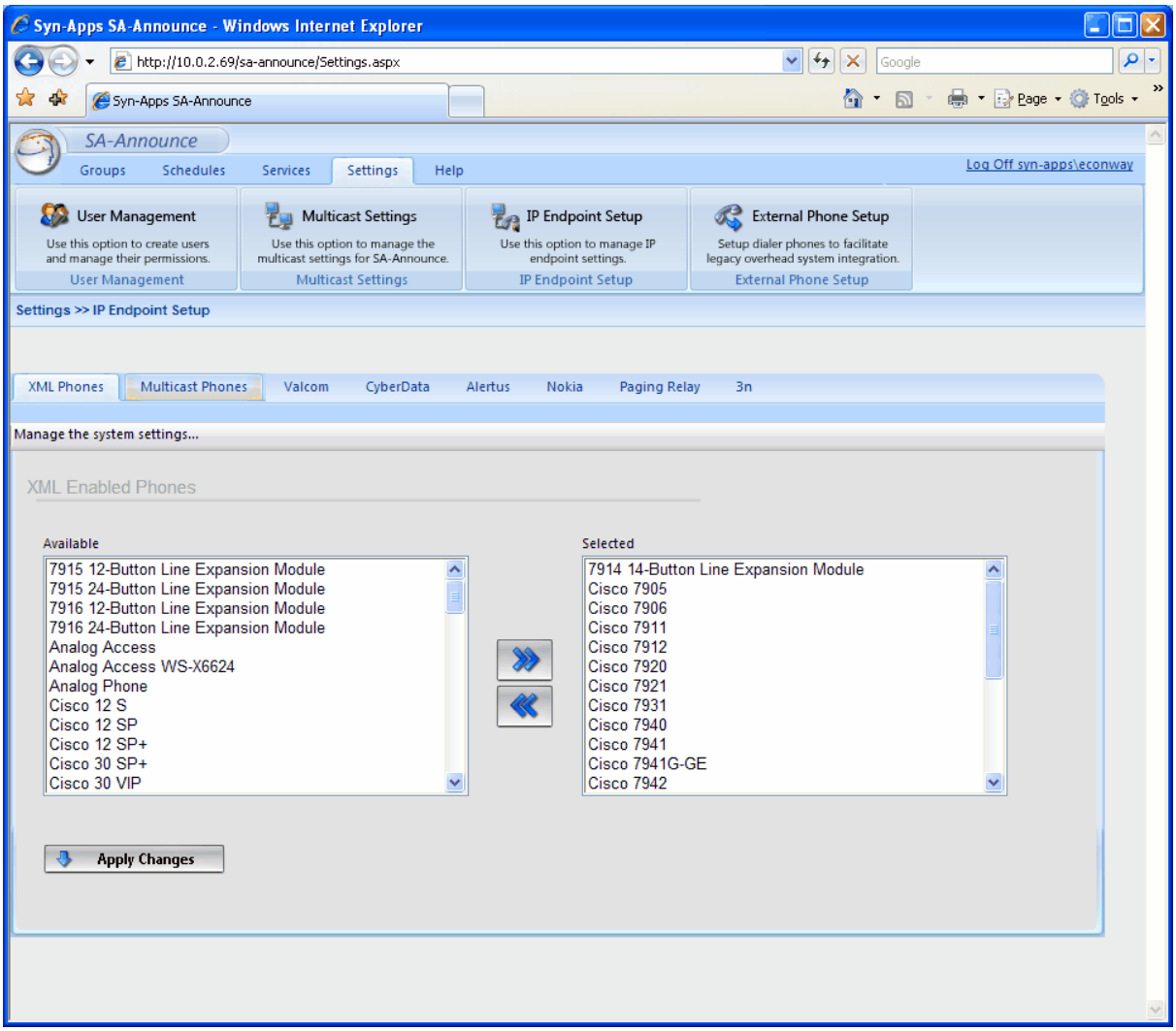
8.2.1 Phone Features

Settings>>IP Endpoint Setup: XML Phones / Multicast Phones

Use the **XML Phones** tab to identify those phones that will participate in XML control and communications. Once new items have been added to the selected side, click **Apply**. (All supported phones are selected by default)

Use the **Multicast Phones** tab to identify those phone models that will be allowed to participate in multicast phone features. Once new items have been added to the selected side, click **Apply**. (All supported phones are selected by default)



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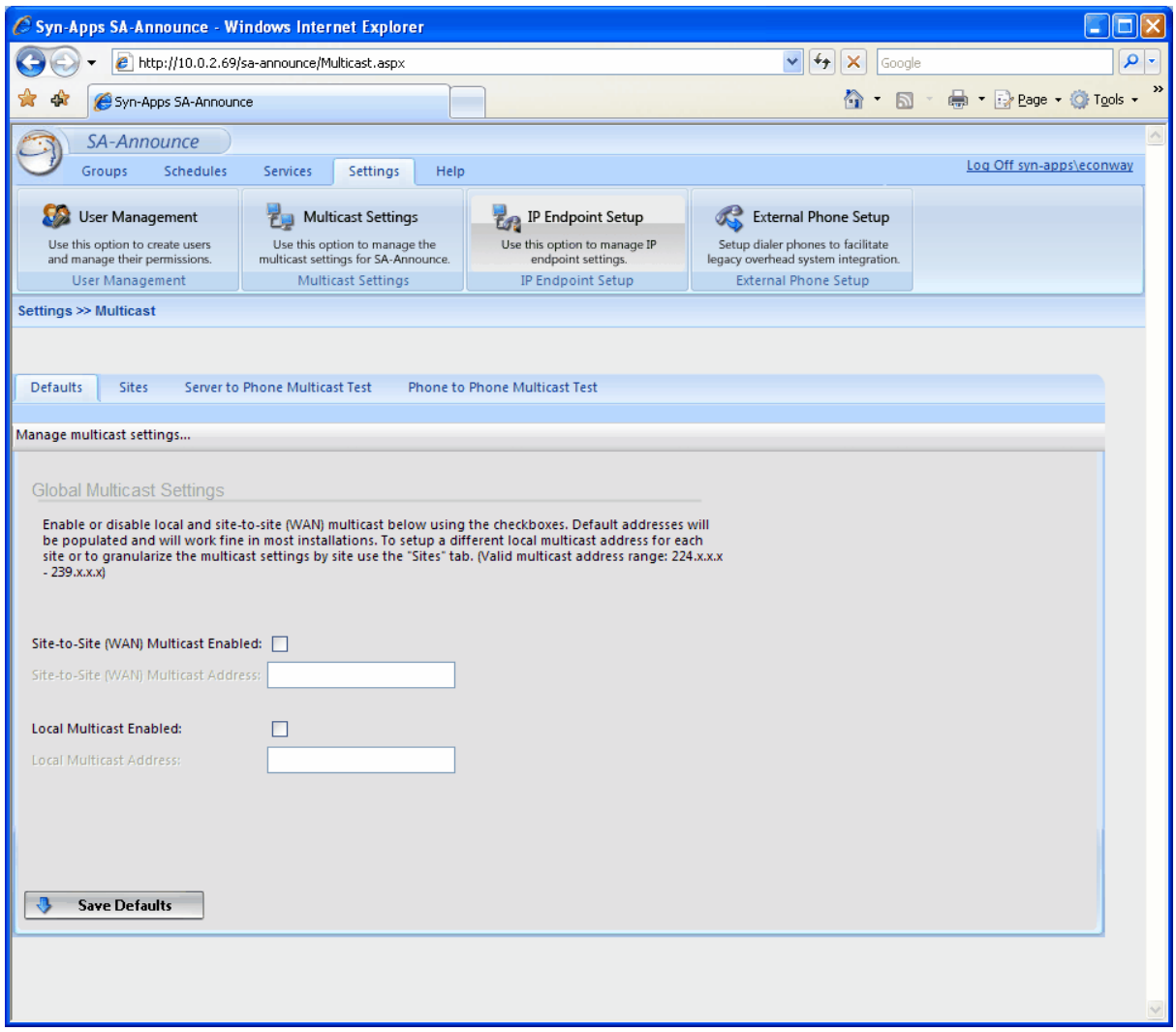
8.3 Multicast Configuration

Settings>>Multicast Settings: Defaults

On the **Multicast Settings** page, you will find four tabs; **Defaults**, **Sites, Server to Phone Multicast Test** and **Phone to Phone Multicast Test**. On the **Defaults** tab you choose whether or not you wish to enable **WAN Multicast** and/or **Local Multicast** globally. Select the **Local Multicast Enabled** checkbox to enable local multicast (IE phones at the server site will have a multicast stream sent, phone that are not at the server site will have unicast streams sent unless **Site to Site (WAN) Multicast Enabled** checkbox is checked). Press the **Save Defaults** button to save any settings changes on the Defaults tab.

The default multicast addresses provided automatically when you check a checkbox should work for most implementations. If multicast boundaries (different multicast address for each sites local multicast traffic) are required use the Sites tab to configure them, most implementations will not need to make changes on the sites tab.


Syn-Apps SA-Announce - Windows Internet Explorer
http://10.0.2.69/sa-announce/Multicast.aspx
Google
Syn-Apps SA-Announce
Page
Tools
SA-Announce
Groups
Schedules
Services
Settings
Help
Log Off syn-apps\econway
User Management
Use this option to create users and manage their permissions.
User Management
Multicast Settings
Use this option to manage the multicast settings for SA-Announce.
Multicast Settings
IP Endpoint Setup
Use this option to manage IP endpoint settings.
IP Endpoint Setup
External Phone Setup
Setup dialer phones to facilitate legacy overhead system integration.
External Phone Setup
Settings >> Multicast
Defaults
Sites
Server to Phone Multicast Test
Phone to Phone Multicast Test
Manage multicast settings...
Global Multicast Settings
Enable or disable local and site-to-site (WAN) multicast below using the checkboxes. Default addresses will be populated and will work fine in most installations. To setup a different local multicast address for each site or to granularize the multicast settings by site use the "Sites" tab. (Valid multicast address range: 224.x.x.x - 239.x.x.x)
Site-to-Site (WAN) Multicast Enabled:
Site-to-Site (WAN) Multicast Address:
Local Multicast Enabled:
Local Multicast Address:
Save Defaults

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Settings>>Multicast Settings: Sites

Use the **Sites** tab to set multicast boundaries for one or more sites. Choose which **Calling Search Space/Device Pool** (site) you wish to configure for **WAN Multicast** and/or **Local Multicast**. Once a site is selected from the drop down box, a list of the devices contained within that site will be listed in the grid to the right. The settings on the **Sites** tab override the settings on the **Defaults** tab, to set a site back to the **Defaults** (global) settings, use the **Back to Defaults** button. Note that pressing **Save** will cause the selected site to use the current settings on the page, the defaults will be overridden for that site until the **Back to Defaults** button is pressed.

The multicast settings have different meaning depending on the mode of operation of the product. The mode of operation is determined by the method used to access the notification groups. If the notification groups are being dialed then Multicast Server Mode is in use and if the notification groups are being activated by the Web Dialer or SA-Announce API then the Web Dialer Mode is in use. These two modes have different streaming models. Multicast Server Mode uses the SA-Announce server to source multicast streams to the Cisco IP Phone end-points while the Web Dialer Mode uses the source Cisco IP Phone to source the multicast stream to the other phones.

If Multicast Server Mode is in use (the default notification mode) then the settings are applied using the destination Cisco IP Phones in the notification group. If all of the destination phones are in the same site then the destination phones site **Local Multicast** setting is applied. If all of the destination phones are not in the same site then the Server Site **WAN Multicast** setting is applied, the Server Site setting should be set to the site that the server resides at in **Services>>Broadcast Services: Settings**.

If the Web Dialer Mode is in use then the settings are applied using the source (caller's) Cisco IP Phone. If all of the Cisco IP Phone destinations of the group are in the same site as the caller then the caller's site **Local Multicast** setting is applied. If all of the Cisco IP Phone destinations of the group are either not in the same site or not in the same site as the caller then the caller's site **WAN Multicast** setting is applied.

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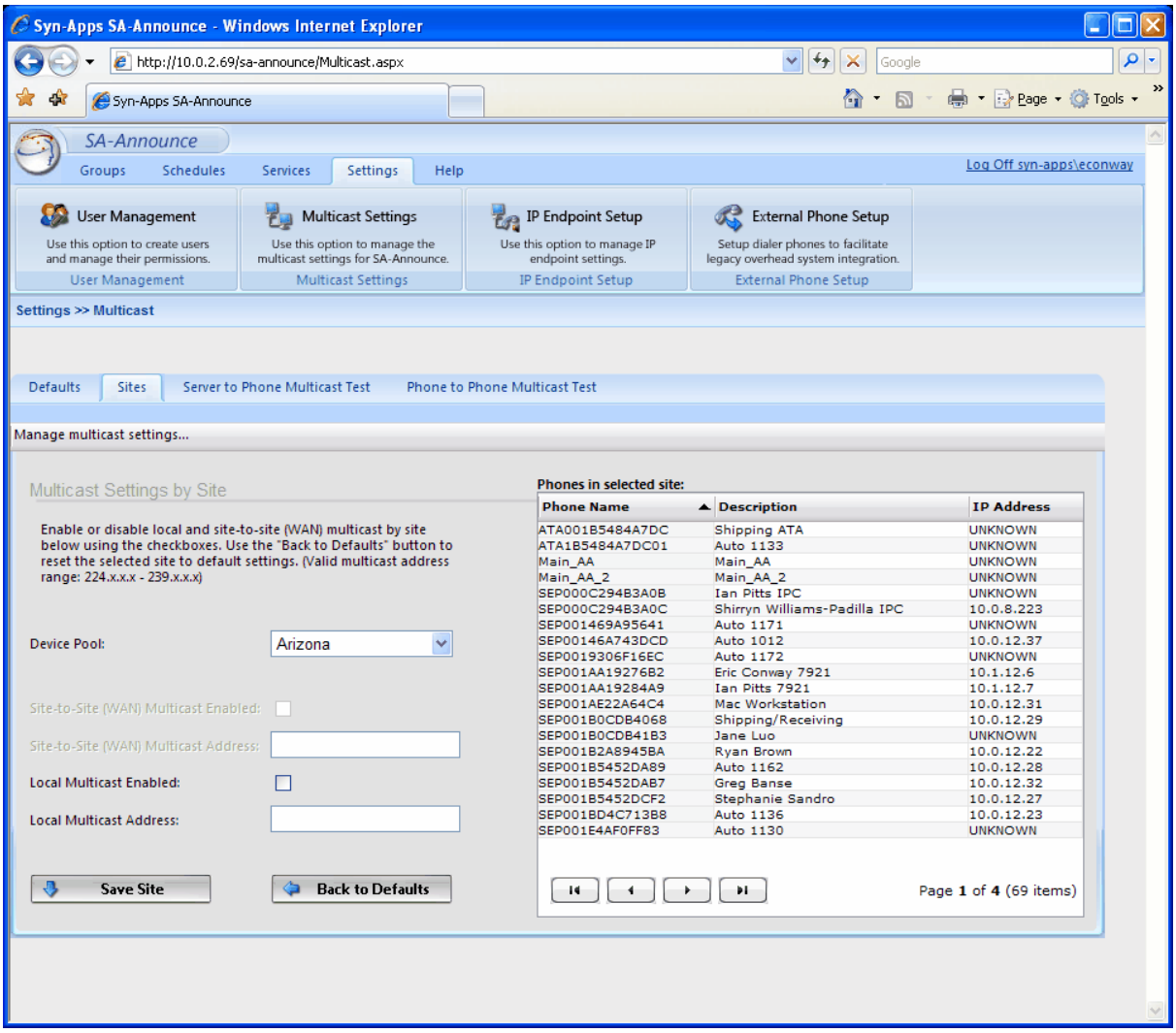
Syn-Apps SA-Announce - Windows Internet Explorer
http://10.0.2.69/sa-announce/Multicast.aspx
Syn-Apps SA-Announce
SA-Announce
Groups
Schedules
Services
Settings
Help
Log Off syn-apps\econway
User Management
Use this option to create users and manage their permissions.
Multicast Settings
Use this option to manage the multicast settings for SA-Announce.
IP Endpoint Setup
Use this option to manage IP endpoint settings.
External Phone Setup
Setup dialer phones to facilitate legacy overhead system integration.
Settings >> Multicast
Defaults
Sites
Server to Phone Multicast Test
Phone to Phone Multicast Test
Manage multicast settings...
Multicast Settings by Site
Enable or disable local and site-to-site (WAN) multicast by site below using the checkboxes. Use the "Back to Defaults" button to reset the selected site to default settings. (Valid multicast address range: 224.x.x.x - 239.x.x.x)
Device Pool:
Arizona
Site-to-Site (WAN) Multicast Enabled:
Site-to-Site (WAN) Multicast Address:
Local Multicast Enabled:
Local Multicast Address:
Save Site
Back to Defaults
Phones in selected site:
Phone Name
Description
IP Address
ATA001B5484A7DC Shipping ATA UNKNOWN
ATA1B5484A7DC01 Auto 1133 UNKNOWN
Main_AA Main_AA UNKNOWN
Main_AA_2 Main_AA_2 UNKNOWN
SEP000C294B3A0B Ian Pitts IPC UNKNOWN
SEP000C294B3A0C Shirryn Williams-Padilla IPC 10.0.8.223
SEP001469A95641 Auto 1171 UNKNOWN
SEP00146A743DCD Auto 1012 10.0.12.37
SEP0019306F16EC Auto 1172 UNKNOWN
SEP001AA19276B2 Eric Conway 7921 10.1.12.6
SEP001AA19284A9 Ian Pitts 7921 10.1.12.7
SEP001AE22A64C4 Mac Workstation 10.0.12.31
SEP001B0CDB4068 Shipping/Receiving 10.0.12.29
SEP001B0CDB41B3 Jane Luo UNKNOWN
SEP001B2A8945BA Ryan Brown 10.0.12.22
SEP001B5452DA89 Auto 1162 10.0.12.28
SEP001B5452DAB7 Greg Banse 10.0.12.32
SEP001B5452DCF2 Stephanie Sandro 10.0.12.27
SEP001BD4C713B8 Auto 1136 10.0.12.23
SEP001E4AF0FF83 Auto 1130 UNKNOWN
Page 1 of 4 (69 items)

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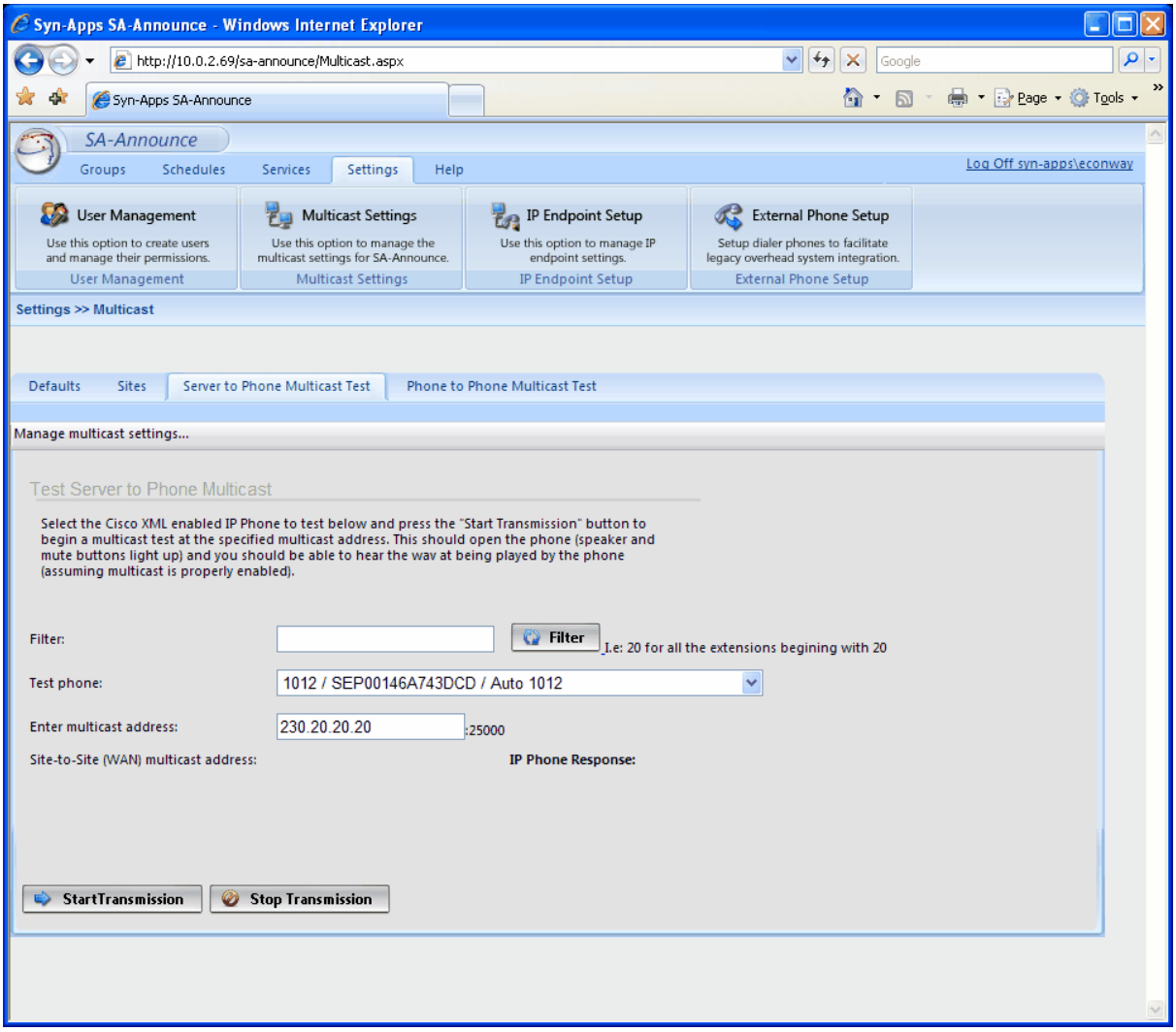
Settings>>Multicast Settings: Server to Phone Multicast Test

Use this tab to perform a server to phone multicast test. This test will verify the server's ability to source multicast to a test phone (choose a phone on different switch than the server).

Select a phone to test from the **Test phone** drop down menu (use the **Filter** button to filter the entries in the menu).
Click the **Start Transmission** button to begin a multicast transmit/receive test.
Verify that a test audio clip is being played on the test phone. If you hear the audio clearly then multicast is functioning properly between the server and that phone.
To stop the testing, press the **Stop Transmission** button.


Syn-Apps SA-Announce - Windows Internet Explorer
http://10.0.2.69/sa-announce/Multicast.aspx
Syn-Apps SA-Announce
SA-Announce
Groups
Schedules
Services
Settings
Help
Log Off syn-apps\econway
User Management
Use this option to create users and manage their permissions.
Multicast Settings
Use this option to manage the multicast settings for SA-Announce.
IP Endpoint Setup
Use this option to manage IP endpoint settings.
External Phone Setup
Setup dialer phones to facilitate legacy overhead system integration.
Settings >> Multicast
Defaults
Sites
Server to Phone Multicast Test
Phone to Phone Multicast Test
Manage multicast settings...
Test Server to Phone Multicast
Select the Cisco XML enabled IP Phone to test below and press the "Start Transmission" button to begin a multicast test at the specified multicast address. This should open the phone (speaker and mute buttons light up) and you should be able to hear the wav at being played by the phone (assuming multicast is properly enabled).
Filter:
Filter
I.e: 20 for all the extensions begining with 20
Test phone:
1012 / SEP00146A743DCD / Auto 1012
Enter multicast address:
230.20.20.20
:25000
Site-to-Site (WAN) multicast address:
IP Phone Response:
StartTransmission
Stop Transmission

***Note:** The primary purpose of this tool is to determine whether multicast is functioning properly on your network. It is suggested that you try phones from each IP Subnet. This ensures that multicast routing is functioning on all subnets.

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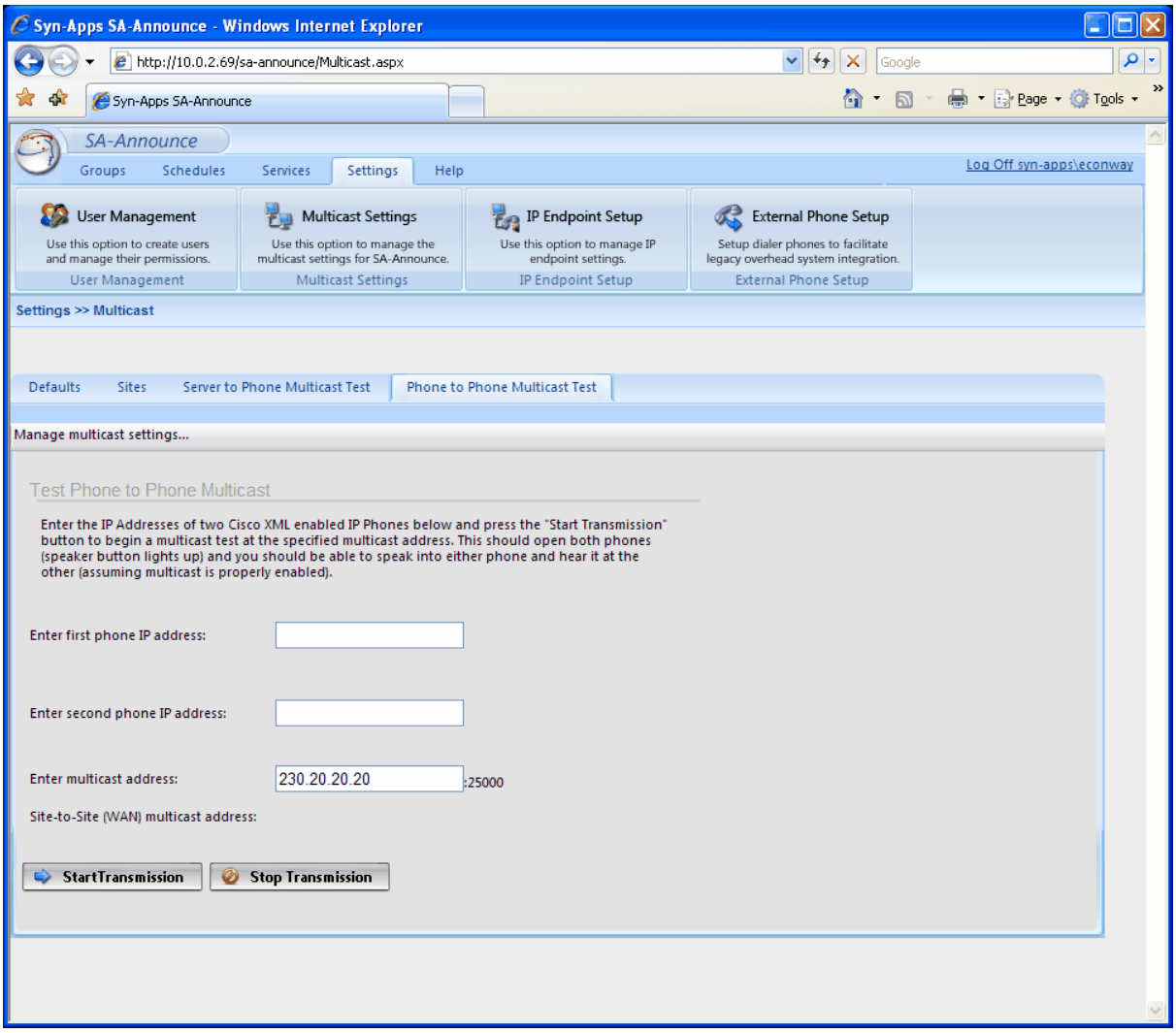
Settings>>Multicast Settings: Phone to Phone Multicast Test

Use this tab to perform a phone to phone multicast test. This test will verify the source phones ability to source multicast to a test phone (choose a destination phone on different switch than the source phone).

Enter the IP Address of the first phone to test in designated area.
Enter the IP Address of the second phone to test in designated area.
Click the **Start Transmission** button to begin a multicast transmit/receive test.
Verify that audio from the first phone is being played on the second phone and vice versa. If you hear the audio clearly then multicast is functioning properly between the two phones.
To stop the testing, press the **Stop Transmission** button.


Syn-Apps SA-Announce - Windows Internet Explorer
http://10.0.2.69/sa-announce/Multicast.aspx
Syn-Apps SA-Announce
SA-Announce
Groups
Schedules
Services
Settings
Help
Log Off syn-apps\econway
User Management
Use this option to create users and manage their permissions.
Multicast Settings
Use this option to manage the multicast settings for SA-Announce.
IP Endpoint Setup
Use this option to manage IP endpoint settings.
External Phone Setup
Setup dialer phones to facilitate legacy overhead system integration.
Settings >> Multicast
Defaults
Sites
Server to Phone Multicast Test
Phone to Phone Multicast Test
Manage multicast settings...
Test Phone to Phone Multicast
Enter the IP Addresses of two Cisco XML enabled IP Phones below and press the "Start Transmission" button to begin a multicast test at the specified multicast address. This should open both phones (speaker button lights up) and you should be able to speak into either phone and hear it at the other (assuming multicast is properly enabled).
Enter first phone IP address:
Enter second phone IP address:
Enter multicast address:
230.20.20.20
:25000
Site-to-Site (WAN) multicast address:
StartTransmission
Stop Transmission

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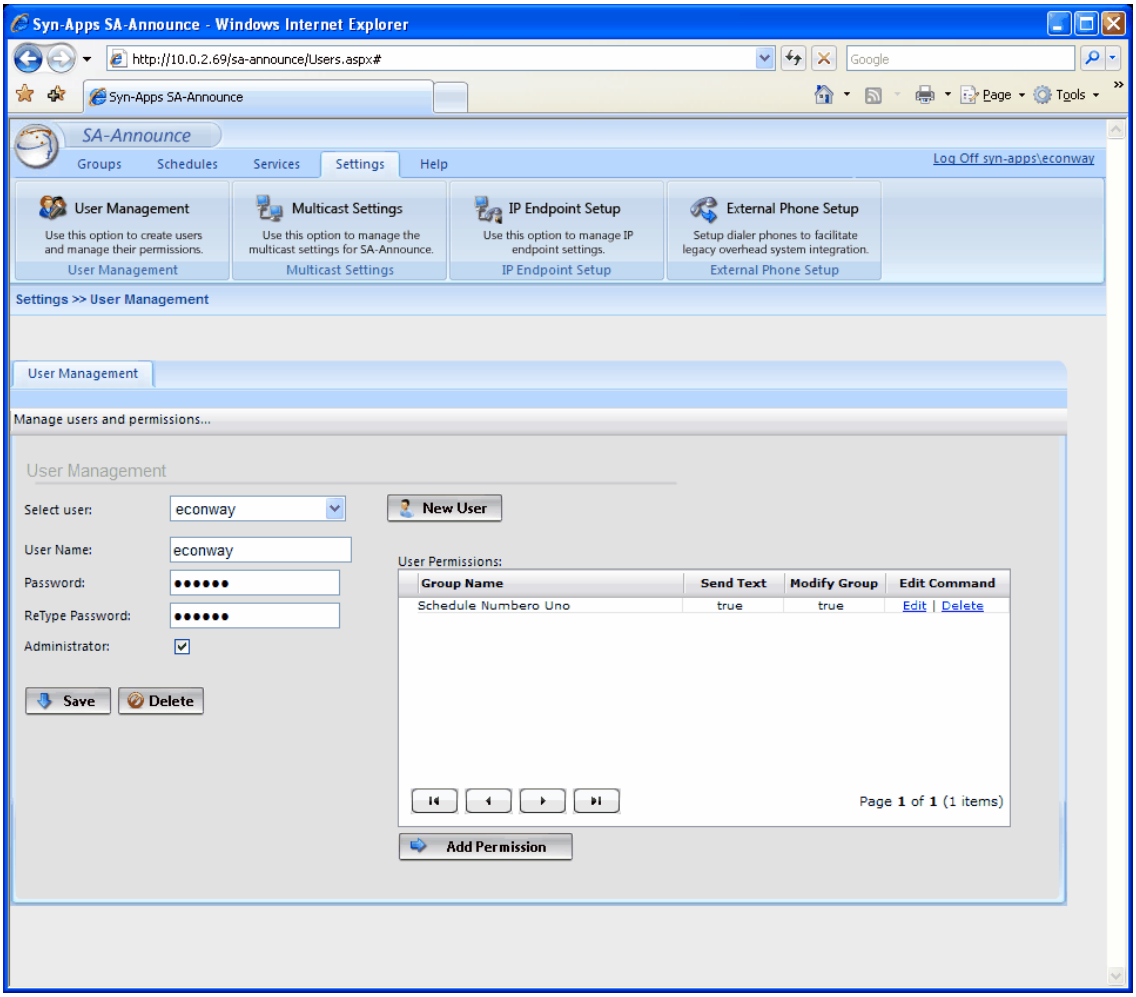
8.4 User Accounts

Settings>>User Management

This section allows administrators to create new users of the SA-Announce notification system and assign them various rights.

Select an existing user using the drop down menu or add a new user using the **New User** button. New users must be given a unique user name and a password. Select the **Administrator** check box to make the user an administrator (administrators have no restrictions in their ability to administer the SA-Announce notification system). Even though you can add permissions to an administrator (as shown below) the permissions will not be meaningful as the user already has full rights.

If the user (new or existing) is not an administrator then they will need some permissions in order to log in and complete an action. Use the **Add Permission** button to add a permission row to the selected user. Select the **Group Name** that you would like to give the user rights to and select one or both check boxes (**Send Text** / **Modify Group**) and then click the **Insert** link in the **Edit Command** Column to insert the new permission. To edit or delete existing permissions click the **Edit** or **Delete** link in the **Edit Command** column of the permissions table.



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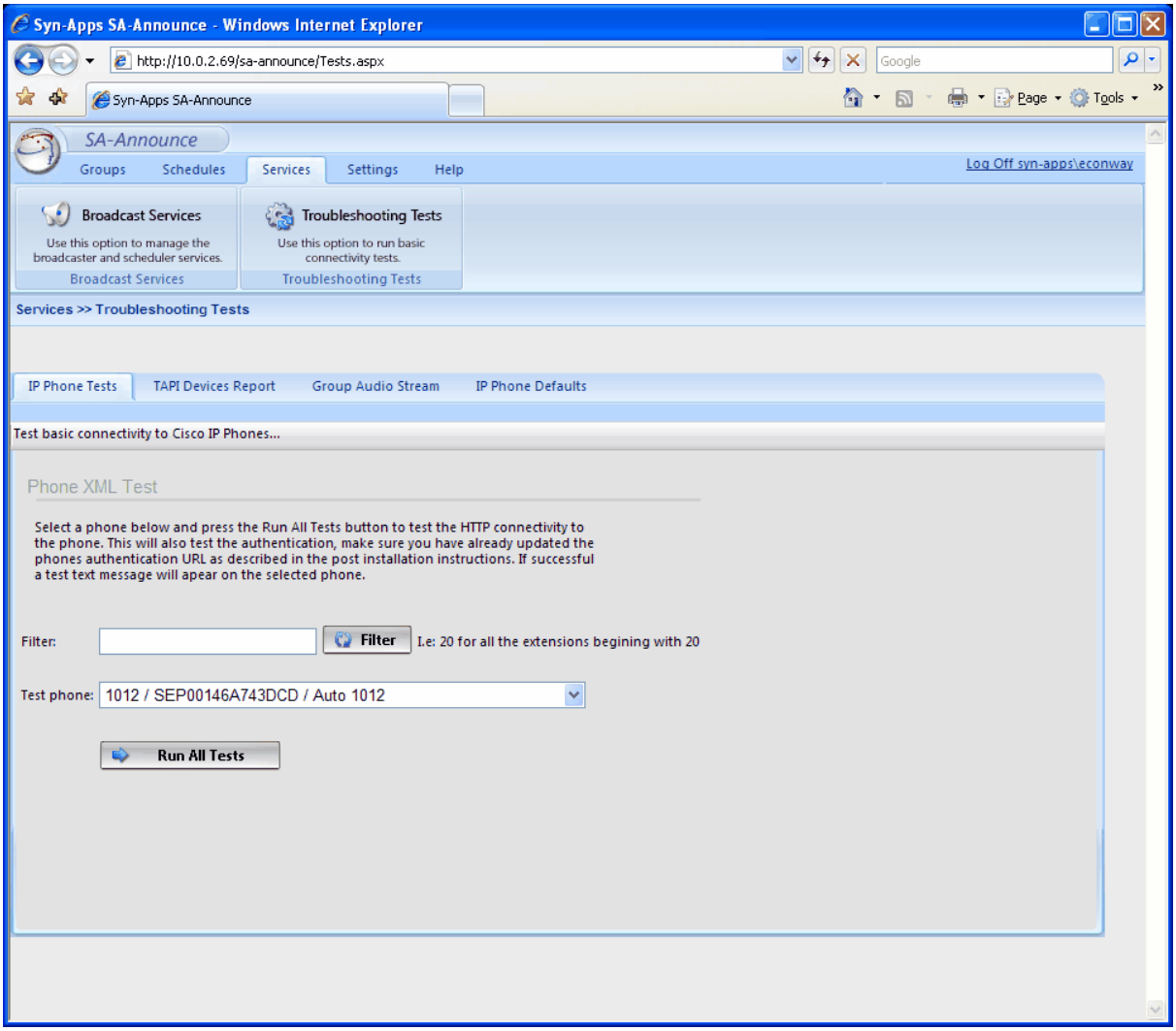
8.5 Configuration Test

Services>>Troubleshooting Tests

With the Communications Manager phones and extensions linked to the SA-Announce Notification system you will need to test connectivity with a phone prior to proceeding.

Click on the **Services>>TroubleshootingTests** menu option and select the **IP Phone Tests** tab as shown below.


Syn-Apps SA-Announce - Windows Internet Explorer
http://10.0.2.69/sa-announce/Tests.aspx
Google
Syn-Apps SA-Announce
Page
Tools
SA-Announce
Groups
Schedules
Services
Settings
Help
Log Off syn-apps\econway
Broadcast Services
Use this option to manage the broadcaster and scheduler services.
Broadcast Services
Troubleshooting Tests
Use this option to run basic connectivity tests.
Troubleshooting Tests
Services >> Troubleshooting Tests
IP Phone Tests
TAPI Devices Report
Group Audio Stream
IP Phone Defaults
Test basic connectivity to Cisco IP Phones...
Phone XML Test
Select a phone below and press the Run All Tests button to test the HTTP connectivity to the phone. This will also test the authentication, make sure you have already updated the phones authentication URL as described in the post installation instructions. If successful a test text message will apear on the selected phone.
Filter:
Filter
I.e: 20 for all the extensions begining with 20
Test phone:
1012 / SEP00146A743DCD / Auto 1012
Run All Tests

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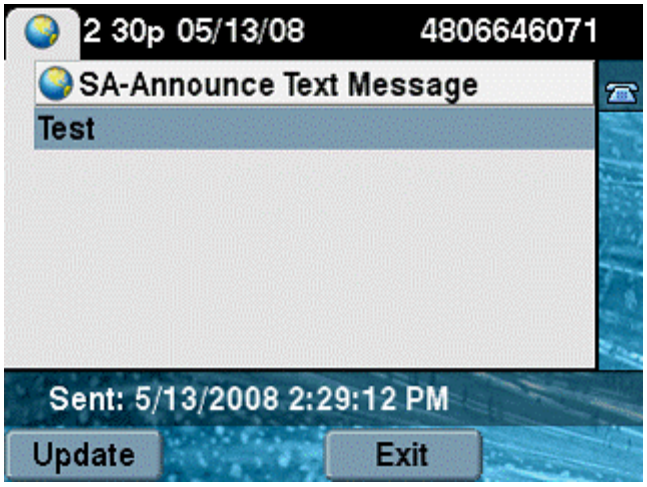
Select an **extension near you** from the **Test Phone** drop down menu.

Click **Run all tests**

1. A message will display on the application screen confirming if the database connection was successful.
2. Look at the phone you selected to test to verify that it shows **Test** on the display screen.



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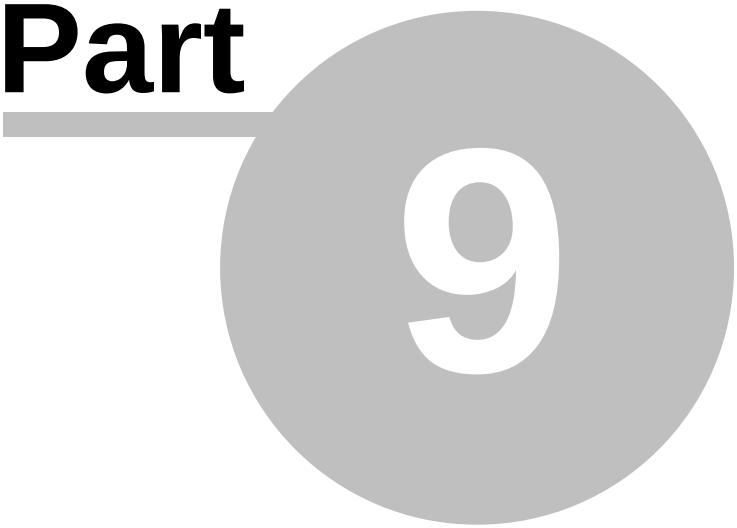
Notification Group Configuration



9 Notification Group Configuration

This section describes how to define the notification groups that users interact with. You will specify the group type, group directory number, other group settings, and the devices that receive the broadcast audio/text.

******Please note that for every notification group you create SA-Announce will automatically create a Syn-Apps virtual phone listed under Device>Phones in Communications Manager, the virtual phone name will begin with SEPFFFF. This is also true for the external phone dialers (the name here begins with SEPEEEE). When you delete notification groups in SA-Announce the associated virtual phones and lines will NOT be deleted from CUCM. After deleting notification groups in SA-Announce please delete the associated virtual phone and line in CUCM administration by searching Device>Phone on the notification group line number or device name.

Please refer to the SA-Anounce: Group Types section of this manual to determine which group type fits your needs.

9.1 SA-Announce: Group Types

Groups>>Create / Edit Groups

The SA-Announce notification system group type choices include:

- **Normal** – This is a one-to-many notification group the delivers one-way audio
- **Holler** – Ad hoc two-way audio notification (support shared lines provided that the destination line number only appears in the line-1 position on one registered phone).
- **Insta-Holler** – Two-way audio notification (predefined destination).
- **Holler-RP** - User may set up a filter to quickly holler (two-way communication) extensions (i.e. #XXXX to intercom extension XXXX)
- **Ad Hoc** – A dynamic one-way audio broadcast to one or more simultaneous destinations.
- **Text** – Allows you to send a text message to a selected phone or group of phones, emails, Alertus, 3n.
- **Emergency Alert** - Provides ability to send alert tones and text messages across predefined groups (Alert, Voice, and Timer Modes)
- **Wokkie Tokkie** – (Normal): A predefined group of phones that emulate a walky-talky when the notification group is dialed.
- **Wokkie Tokkie -** (Ad Hoc): Non-predefined group of phones that emulate a walky-talky when the notification group is dialed.
- **Record-N-Play -** Record-N-Play allows you to define a pre-set list of endpoints the will receive a store and forward type broadcast (breaks feedback loops).
- **Respond** - Respond groups are just like a normal group but all destination phones are sent a respond soft-key and one user can respond to the originator.

The following section describe the group types in more detail...

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9.1.1 Normal

A normal group allows you to pre-define end-points that will receive the source callers live audio when the group is activated. This is a one-to-many group the delivers live one-way audio.

9.1.2 Holler

After calling a Holler page group you are prompted for a destination extension followed by the # sign. SA-Announce opens that destination for 2 way audio (hands-free Cisco phone models only). This is equivalent of an intercom.

Holler groups use the CSS of the calling line/phone to search for the destination line. In other words, if the calling phone can dial the destination phone normally then it will be able to holler to it as long as the destination is not a shared line (see the next paragraph). You can now exclude phones from holler groups by selecting them in the IP Phones tab or the create edit groups interface, note that in this case you are selecting phones that are NOT to be included which is the opposite of the other group types.

Since the destination is determined by number and must be unique, shared lines can cause issues. If a shared line is the first line listed on only one phone, then that phone will be activated for holler. If the shared line is the first line on more than one phone or the shared line is not the first line on any phone, then holler will fail and notify the caller that the destination is a shared line. If this issue must be overcome add unique directory numbers to the phones or see the Insta-Holler group type.

9.1.3 Insta-Holler

An Insta-Holler group allows you to pre-define a single XML Enabled IP Phone that will receive a two-way audio intercom when the group is activated. This is a one-to-one group that delivers two-way audio.

9.1.4 Holler-RP

Holler-RP uses a line number mask to allow direct intercom access to any extension. This allows you to preempt the extension with a wildcard like * or #. For example, in a four digit dial plan using the pattern #XXXX, dialing #2000 would intercom extension 2000, dialing #2003 would intercom extension 2003 and so on. The extension used must end in a number of "X" characters equal to the length of the internal dial plan.

Holler groups use the CSS of the calling line/phone to search for the destination line. In other words, if the calling phone can dial the destination phone normally then it will be able to holler to it as long as the destination is not a shared line (see the next paragraph). You can now exclude phones from holler groups by selecting them in the IP Phones tab or the create edit groups interface, note that in this case you are selecting phones that are NOT to be included which is the opposite of the other group types.

Since the destination is determined by number and must be unique, shared lines can cause issues. If a shared line is the first line listed on only one phone, then that phone will be activated for holler. If the shared line is the first line on more than one phone or the shared line is not the first line on any phone, then holler will fail and notify the caller that the destination is a shared line. If this issue must be overcome add unique directory numbers to the phones or see the Insta-Holler group type.

9.1.5 Ad Hoc

Call into an AD HOC page group and you are prompted for destination numbers delimited by pound. You are able to page them without pre-defining a page group or entering the administrative interface. For example if you wanted to page extensions 1000, 2000, 3000, you would activate the page group by dialing its directory number and when prompted enter 1000#, 2000#, 3000#, and # again. This would activate extensions 1000, 2000 and 3000 for an AD HOC one way audio page.

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9.1.6 Text

Allows you to send a text message to a selected group of phones that you don't intend to send audio to. Text groups do not require a device in Communications Manager. Sound notifications have been added to alert recipients of text message delivery. SA-Announce allows you to cycle through old text messages and also has a configurable retention timer to save the messages.

Note that any group type that contains an end-point association (holler and ad-hoc have no end-point associations) can be used on the **Groups>>Send a Message** page to send text messages.

See Also Text Only Page Groups.

9.1.7 Emergency Alert

Emergency Alert provides the ability to send alert tones across predefined groups (Alert, Voice, and Timed Modes). Emergency Alert groups are for use in emergency situations, and as such they override busy detection (phones on a call will still receive the text and audio associated with the group activation). For example: a school on lockdown alert, tornado warning, fire, etc..

- Alert Mode
  - In the default mode (alert mode) the emergency alert group will send the defined alert text and sound file to the destinations of the group. The sound file will continue to replay and the text will be visible until the group is called again at which point the alert is turned off and the text is removed from the devices that support text.
- Voice Mode
  - In voice mode the emergency alert group will send the alert text to the phones and play the sound file once. The caller of the group can then give further instruction by speaking into their handset. When the caller ends the call the emergency alert text is cleared from all phones.
- Timed Mode
  - In timed mode the emergency alert group will play the selected sound file the number of times specified in the repeat number text box. When the sound completes playing the group is closed down and the text is removed from the phones.

Selecting the “send caller id to destinations” checkbox on the groups page is especially interesting here since it will send the originators caller-id to all destinations of the emergency.

See Also Creating Emergency Alert Groups

9.1.8 Wokkie Tokkie (Normal)

Wokkie Tokkie is a predefined group of phones that emulates a walky-talky when the page is dialed. This is a one-to-many, two-way group. This group type works with multicast only. You must have multicast configured properly on your network in order for Wokkie Tokkie to function.

After dialing a Wokkie Tokkie group the source phone and destinations will be presented with the following screen pop:

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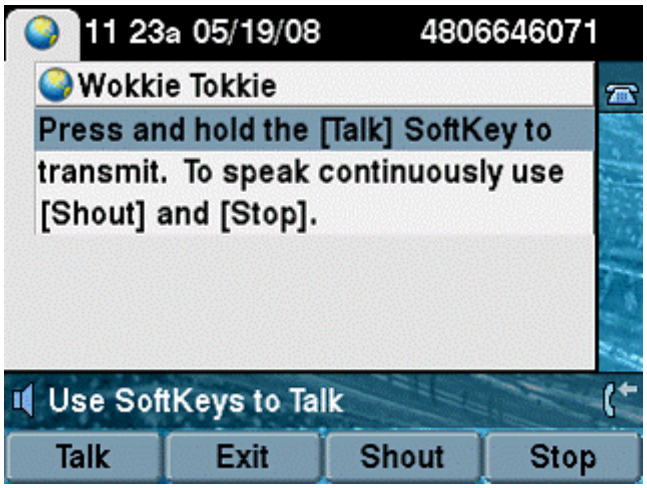
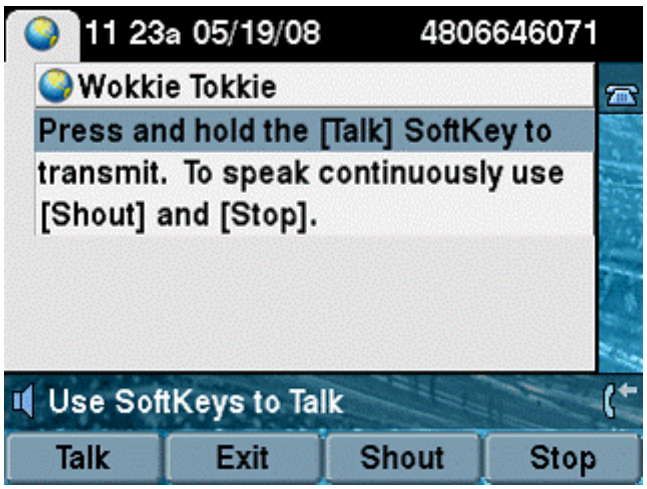


Press and hold the **Talk** softkey to transmit, as you would with a walky-talky. Press **Shout** to speak continuously and **Stop** when you are finished. Press **Exit** to exit.

9.1.9 Wokkie Tokkie (Ad Hoc)

Wokkie Tokkie (Ad Hoc) allows you to dynamically select destination endpoints delimited by the pound sign. All other functionality is the same as Wokkie Tokkie (Normal). This is a one-to-many, two-way group. This group type works with multicast only. You must have multicast configured properly on your network in order for Wokkie Tokkie to function.

After dialing a Wokkie Tokkie group the source phone and destinations will be presented with the following screen pop:



Press and hold the **Talk** soft-key to transmit, as you would with a walky-talky. Press **Shout** to speak continuously.

9.1.10 RecordNPlay

Record-N-Play allows you to define a pre-set list of endpoints the will receive a broadcast. The page originator calls into the group and is prompted for the page message and then hangs up the call when done. The system will then broadcast the message after the caller has terminated the call. This is useful in areas that have a lot of background noise and the chance of audio feedback with a live page.

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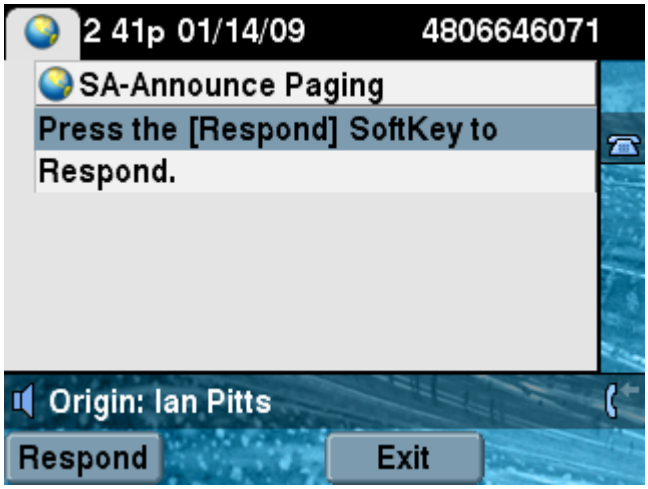
9.1.11 Respond

The Respond notification group type is much like a standard Normal type group (one-way one-to-many audio), but the IP Phone destinations of the group will have a text display presented that contains a "Respond" soft-key which when depressed will allow one user to respond to the source caller. Once a response begins all phones but the source and responder will close down and the source / responder will be on a one-to-one two-way conversation.



9.2 Notification Group Setup

Groups>>Create / Edit Groups: General

Note: Until the first non-text notification group is created, the SA-Announce Broadcaster service is stopped and cannot be started.

Click **Groups>>Create / Edit Groups** from the main menu, the General tab should be displayed.
Click **New Group.**
Configure the following items:

- **Group Name:** Enter a descriptive name for the group, the group name will be displayed in the phone service menu and as the caller-id of the group.
- **Group Type** - Select a group type, a **Normal** notification group type is usually the best to begin with (for Emergency Alert groups see the Creating Emergency Alert Groups section of this manual).
- **Group Phone**: *The group phone area will not be visible with Text type groups as text groups do not require activation via phone call.*
  - **Line Number** - This is the extension that you will use to call (activate) the notification group, the next available line is placed in the field by default. Enter a unique line number here.
  - **Partition** - The partition the group phone should belong to (IE Phones must have a CSS containing this Partition to be able to dial the group).
  - **Device Pool** - Device pool the phone should belong to (the Device Pool must be set such that anyone calling the group gets a G711 codec lookup).
- **Misc Settings**:
  - **Use Security Code** - To secure the group check this checkbox and enter a DTMF code to associate to the group.
  - **Send Caller-ID** - IP Phones within the selected group will receive the caller ID associated with the source phone line.
  - **Emergency** - Busy detection overridden for this group, agents on a call will also receive the notification audio stream and or text message.
  - **Volume** - The volume of the IP Phone end-points in the group.

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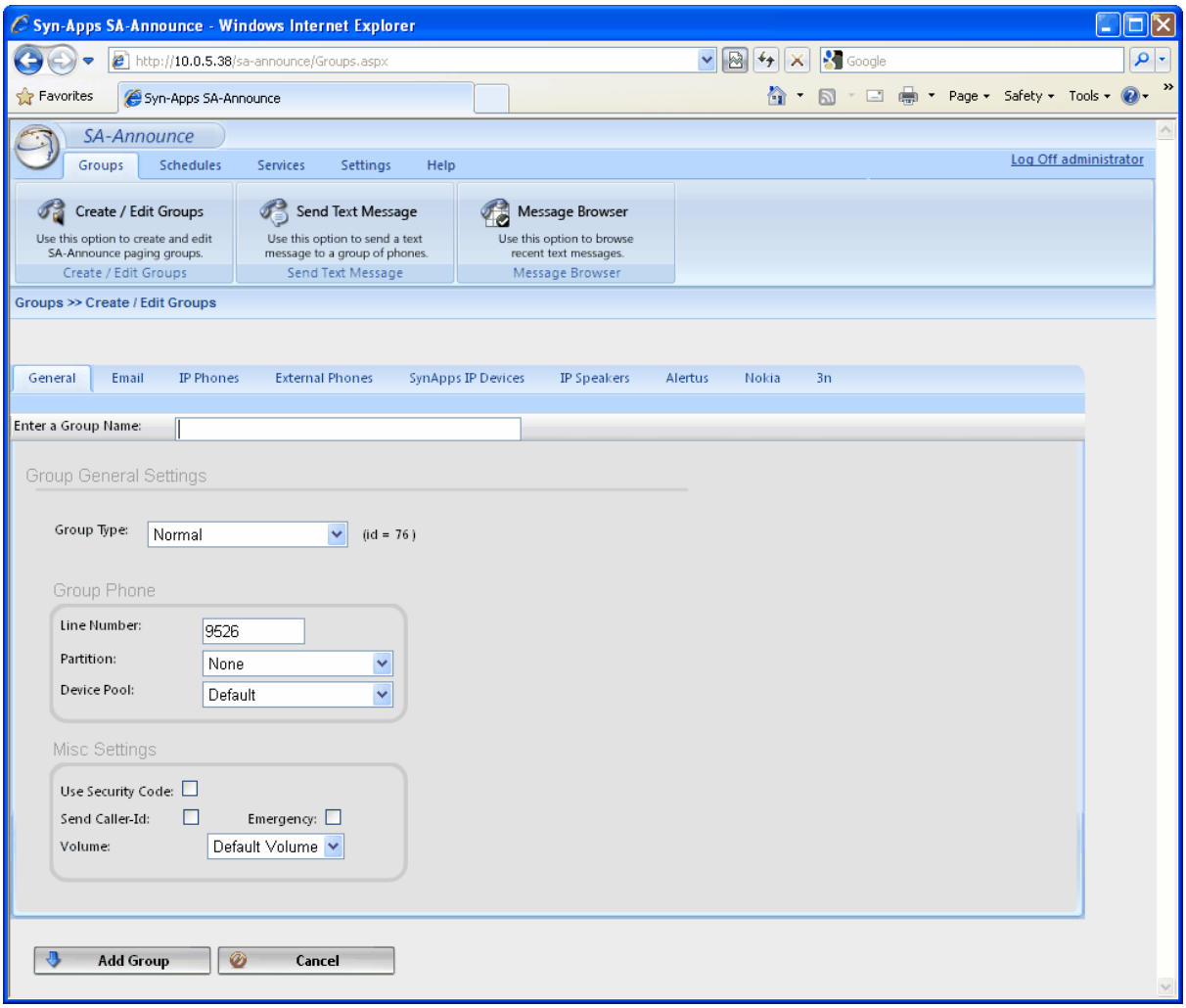
The **Volume** drop down menu allows you to adjust the volume of your voice coming through over the phone speaker. The Default volume setting uses the setting of each phones speaker individually, other settings such as 90%, 80% etc override the current volume setting on the phone and forces the phone to play the audio at the percentage of maximum volume specified.

****Please note that while this does affect the volume of phones it does not affect the volume of Valcom IP Speakers / CyberData IP Speakers / Legacy Overhead Systems / Alertus Endpoints.****

**Create a “whisper” group by configuring an emergency group type with a volume setting of 50% or below, and this would allow you to “whisper” pertinent information to an agent already on a call.

[It is now possible to add the group even though end-points have not been associated yet, this can be done after adding the group (as presented in this manual) or before adding the group.]

Click **Add Group.** Once added, you are now free to add, remove and view information about specific devices within all of the groups that have been created.



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9.3 Email

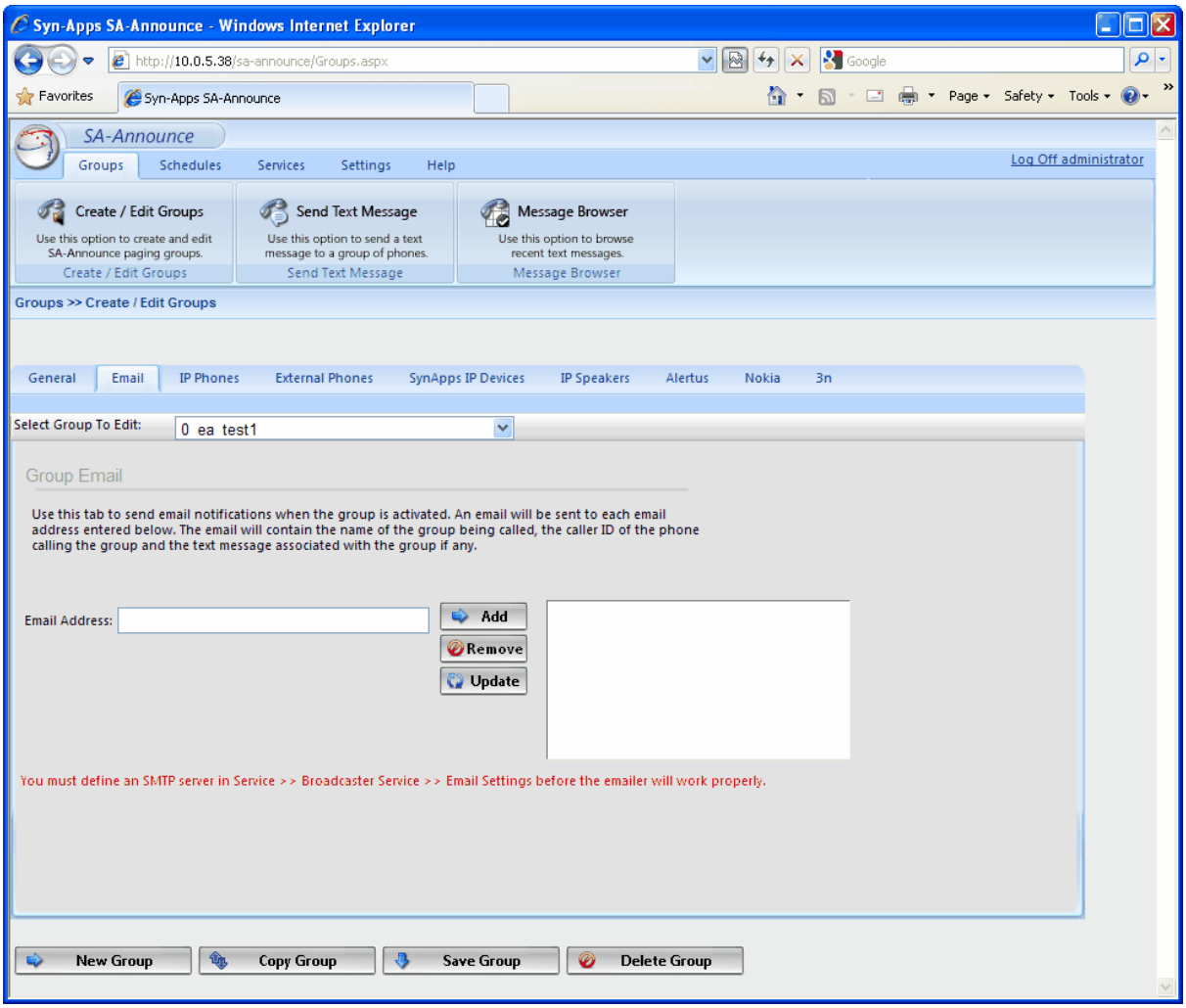
Groups>>Create / Edit Groups

The **Email** tab on the **Create / Edit Groups** page allows email(s) to be sent when a group is called (or otherwise activated).

To use this feature you must first setup the email parameters at **Services>>Broadcaster Services>>Email Settings**, see the Email Settings chapter of this manual for more information.

Add one or many email addresses to the group using the provided interface. Use email aliases when there are many emails to be sent (more than 10) to avoid overloading the SA-Announce system.

***Note: Mass SMS messaging (50 or more messages sent to the same provider) must be done using an aggregator service such as 3n (National Notification Network). Otherwise, sending too many SMS messages to a specific cellular provider might result in all messages being treated as Spam.


Syn-Apps SA-Announce - Windows Internet Explorer
http://10.0.5.38/sa-announce/Groups.aspx
Favorites
Syn-Apps SA-Announce
Page
Safety
Tools
SA-Announce
Groups
Schedules
Services
Settings
Help
Log Off administrator
Create / Edit Groups
Use this option to create and edit SA-Announce paging groups.
Create / Edit Groups
Send Text Message
Use this option to send a text message to a group of phones.
Send Text Message
Message Browser
Use this option to browse recent text messages.
Message Browser
Groups >> Create / Edit Groups
General
Email
IP Phones
External Phones
SynApps IP Devices
IP Speakers
Alertus
Nokia
3n
Select Group To Edit:
0 ea test1
Group Email
Use this tab to send email notifications when the group is activated. An email will be sent to each email address entered below. The email will contain the name of the group being called, the caller ID of the phone calling the group and the text message associated with the group if any.
Email Address:
Add
Remove
Update
You must define an SMTP server in Service >> Broadcaster Service >> Email Settings before the emailer will work properly.
New Group
Copy Group
Save Group
Delete Group

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9.4 IP Phones

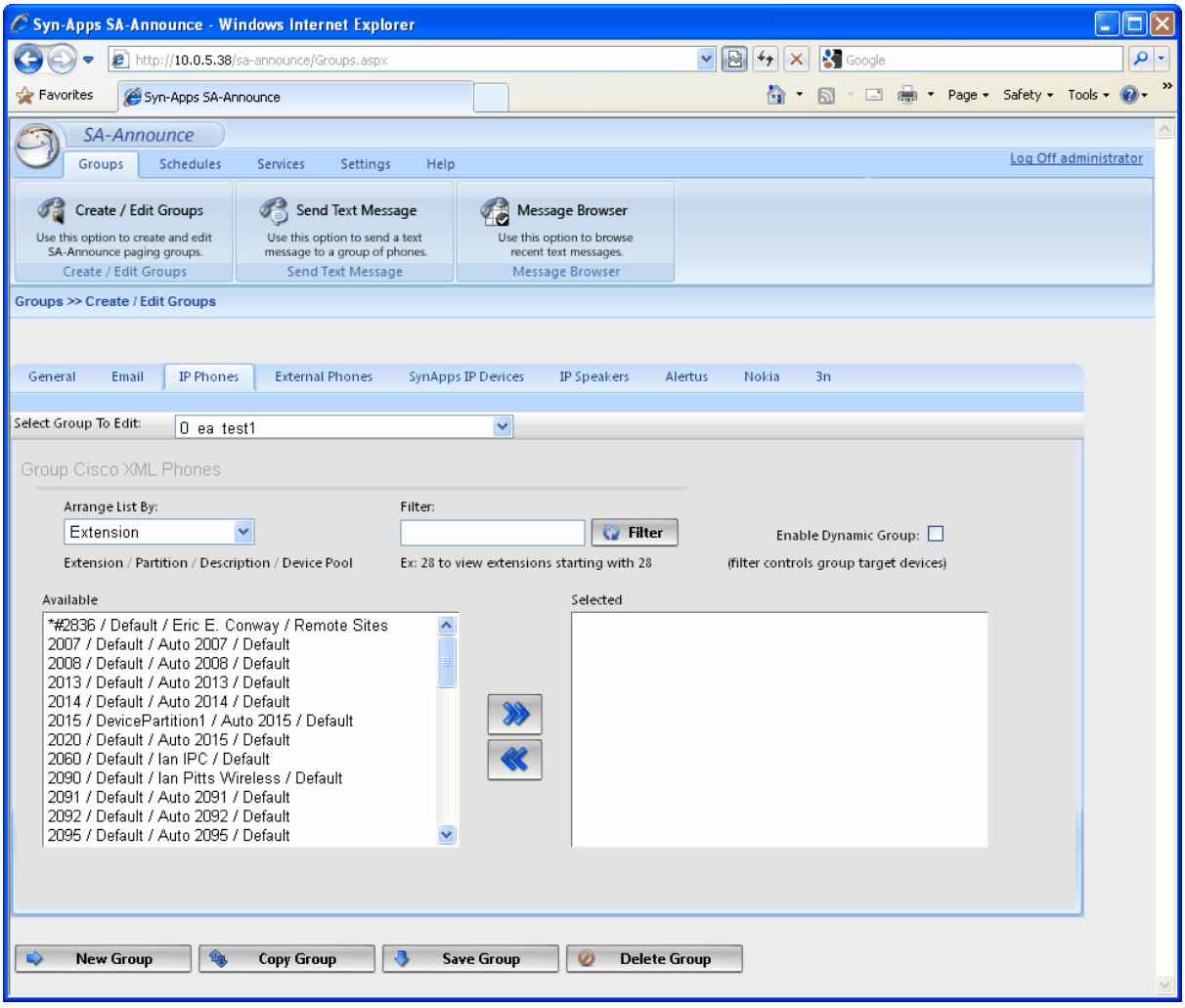
Groups>>Create / Edit Groups: IP Phones

Add phones to a notification group by selecting the **IP Phones** tab. Use the **Arrange List By** drop down menu to resort the list on the selected item.

Select the phones you would like to add by clicking the items and adding them using the "**>>**" button. You can use standard ctrl-click and shift-click to select items, or use the **Filter** column to filter the list.

The **Enable Dynamic Group** checkbox will dynamically lock the group to use the phones that match the specified **Filter**. IE enabling the dynamic group checkbox, arranging by Device Pool and entering ABC into the filter column will associate all phones that have an Device Pool beginning with "ABC" to the notification group. This is useful when you have a paging group for a site and that site has a specific Device Pool / CSS etc, by using the dynamic group option as you add phones to the system you will not have to manage your SA-Announce notificaiton groups.

Note: For Holler and Holler-RP group types you can now select phones to be disallowed as targets of Holler and Holler-RP. Remember, in this case you are selecting phones that are not to be included in the group.


Syn-Apps SA-Announce - Windows Internet Explorer
http://10.0.5.38/sa-announce/Groups.aspx
Favorites
Syn-Apps SA-Announce
SA-Announce
Groups
Schedules
Services
Settings
Help
Log Off administrator
Create / Edit Groups
Use this option to create and edit SA-Announce paging groups.
Send Text Message
Use this option to send a text message to a group of phones.
Message Browser
Use this option to browse recent text messages.
Groups >> Create / Edit Groups
General
Email
IP Phones
External Phones
SynApps IP Devices
IP Speakers
Alertus
Nokia
3n
Select Group To Edit:
0 ea test1
Group Cisco XML Phones
Arrange List By:
Extension
Extension / Partition / Description / Device Pool
Filter:
Filter
Ex: 28 to view extensions starting with 28
Enable Dynamic Group:
(filter controls group target devices)
Available
*#2836 / Default / Eric E. Conway / Remote Sites
2007 / Default / Auto 2007 / Default
2008 / Default / Auto 2008 / Default
2013 / Default / Auto 2013 / Default
2014 / Default / Auto 2014 / Default
2015 / DevicePartition1 / Auto 2015 / Default
2020 / Default / Auto 2015 / Default
2060 / Default / Ian IPC / Default
2090 / Default / Ian Pitts Wireless / Default
2091 / Default / Auto 2091 / Default
2092 / Default / Auto 2092 / Default
2095 / Default / Auto 2095 / Default
Selected
New Group
Copy Group
Save Group
Delete Group

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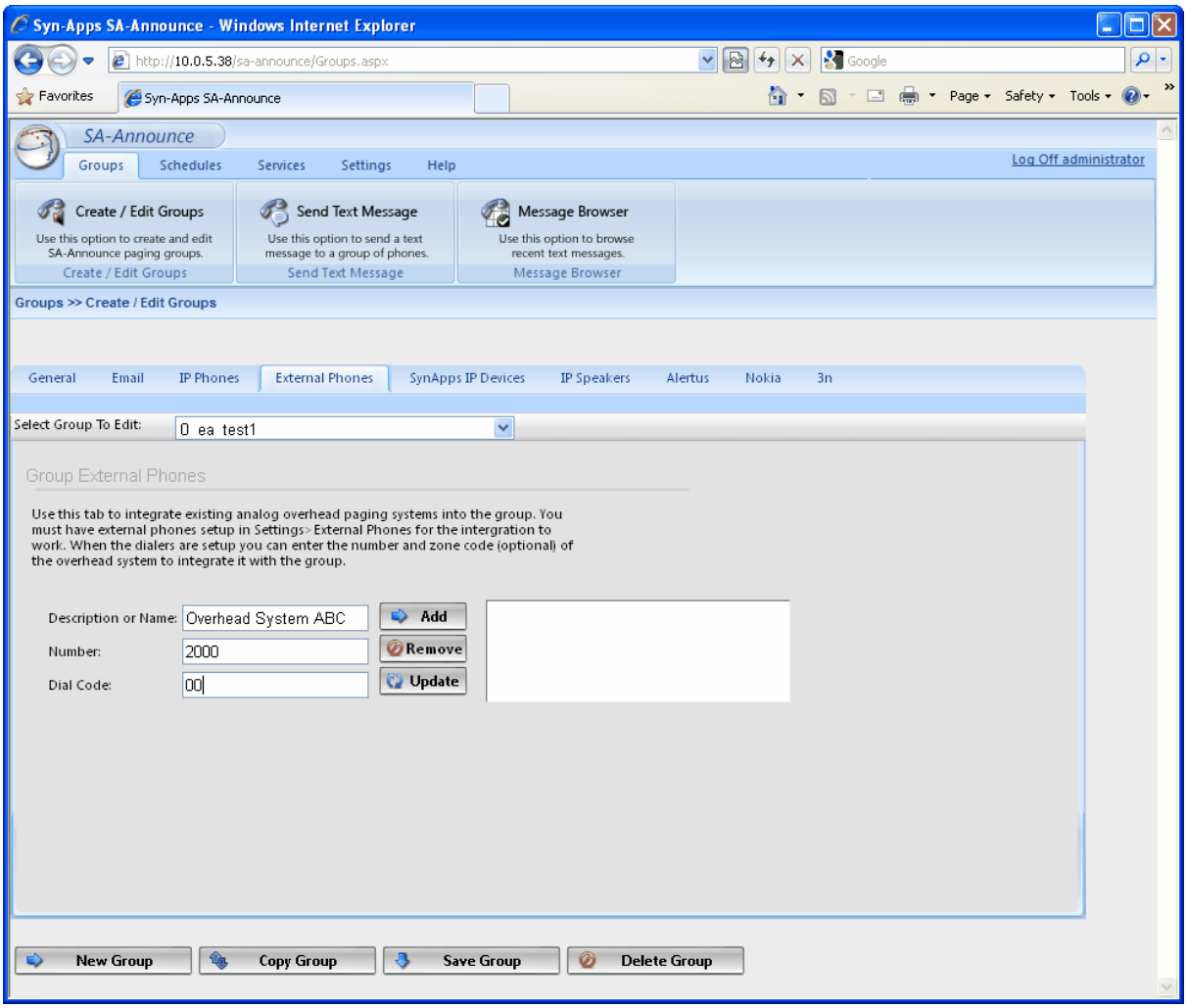
9.5 External Phones

Groups>>Create / Edit Groups: External Phones

Add legacy overhead systems or other dial-able numbers to a notification group by selecting the **External Phones** tab. First make sure the overhead system in question can be dialed from the digital phones, the number used by the digital phones is generally the number that will be used to configure the notification group to use the overhead system in question.

External dialers must be setup before the external phone integration will work properly, use the **Settings>>External Phone Setup** web page to configure external dialers. The setup is described in detail in the Analog Paging System Integration section.

Use the interface on the page to add external systems to the notification group. Enter a description in the **Description or Name** field, enter the number that the overhead system exists at in the **Number** field and enter any DTMF zone code if one is required in the **Dial Code** field. Press the **Add** button to add the external system to the selected notification group. To remove an external system from a group, select the line item from the list box on the right and press the **Remove** button. To update an existing external system in a group, select the line item. The current values will populate the entry fields, change the values and press the **Update** button.



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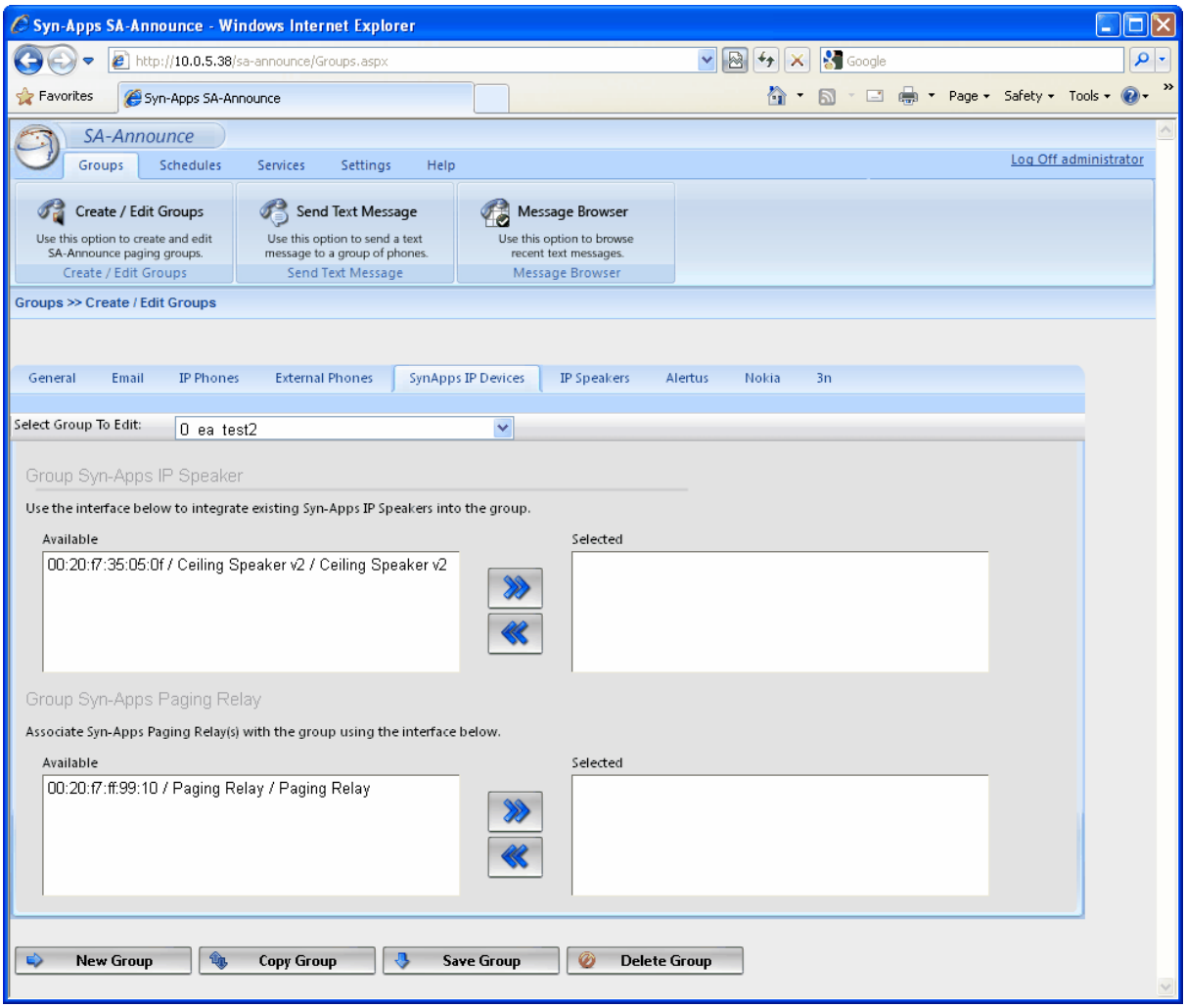
9.6 Syn-Apps IP Devices

Groups>>Create / Edit Groups: Syn-Apps IP Devices

This section describes use of Syn-Apps IP Speakers and Paging Relays in SA-Announce notification groups. Syn-Apps IP Speakers and Paging Relays must be added to the system using the DHCP option 72 as described in the Paging Relay Setup and Syn-Apps IP Speaker Setup sections of this manual before they will be visible in the groups or schedules interface.

To add a Syn-Apps IP Speaker to a particular notification group, first select the group in question on the Groups>>Create / Edit Groups page. On the Syn-Apps IP Devices tab select the IP Speaker(s) to add to the group from the **Available** side of the list box and add them to the **Selected** side using the "**>>**" button.

To add a Syn-Apps Paging Relay to a particular notification group, first select the group in question on the Groups>>Create / Edit Groups page. On the Syn-Apps IP Devices tab select the Paging Relay(s) to add to the group from the **Available** side of the list box and add them to the **Selected** side using the "**>>**" button.



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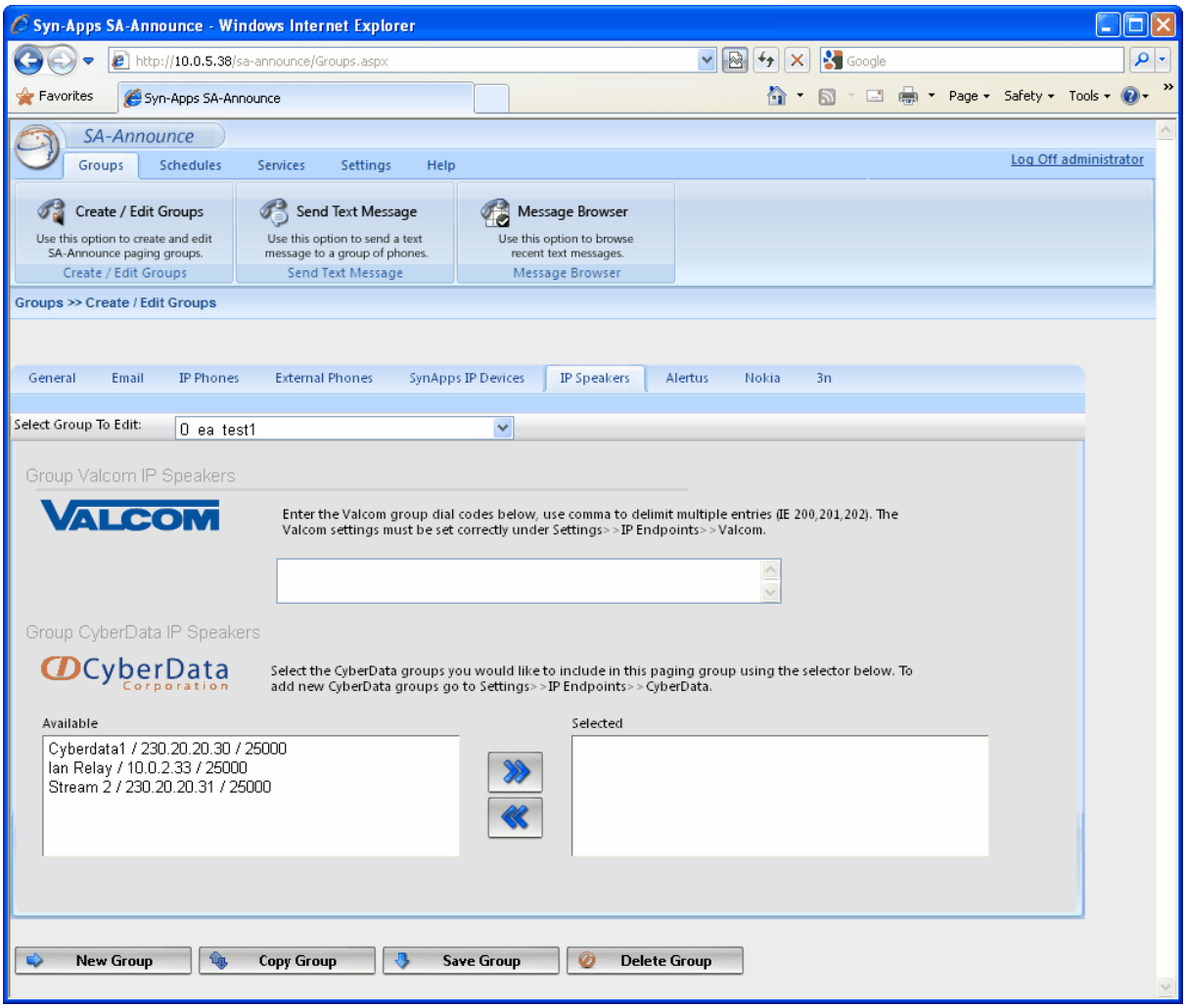
9.7 IP Speaker Integration

Groups>>Create / Edit Groups: IP Speakers

This section describes how to add Valcom or CyberData IP speakers into desired notification groups.

Use the Valcom section to assign Valcom IP speakers to the group you are currently editing, simply add the speakers' group number(s) to the text entry box. To assign multiple Valcom IP speakers to a group delimit the group numbers with commas. Verify the Valcom IP Speaker settings from the Settings>>IP Endpoints: Valcom section.

CyberData IP Speaker groups must first be setup using the Settings>>IP Endpoint Setup: CyberData section. Use the CyberData section to assign CyberData IP Speaker groups to the paging group. Simply select the CyberData speaker group from the **Available** side of the list box and press the "**>>**" button to add the CyberData group to the **Selected** side of the list box.



***Note: Prerequisite required, see Valcom IP Speaker Configuration and CyberData IP Speaker Configuration.**

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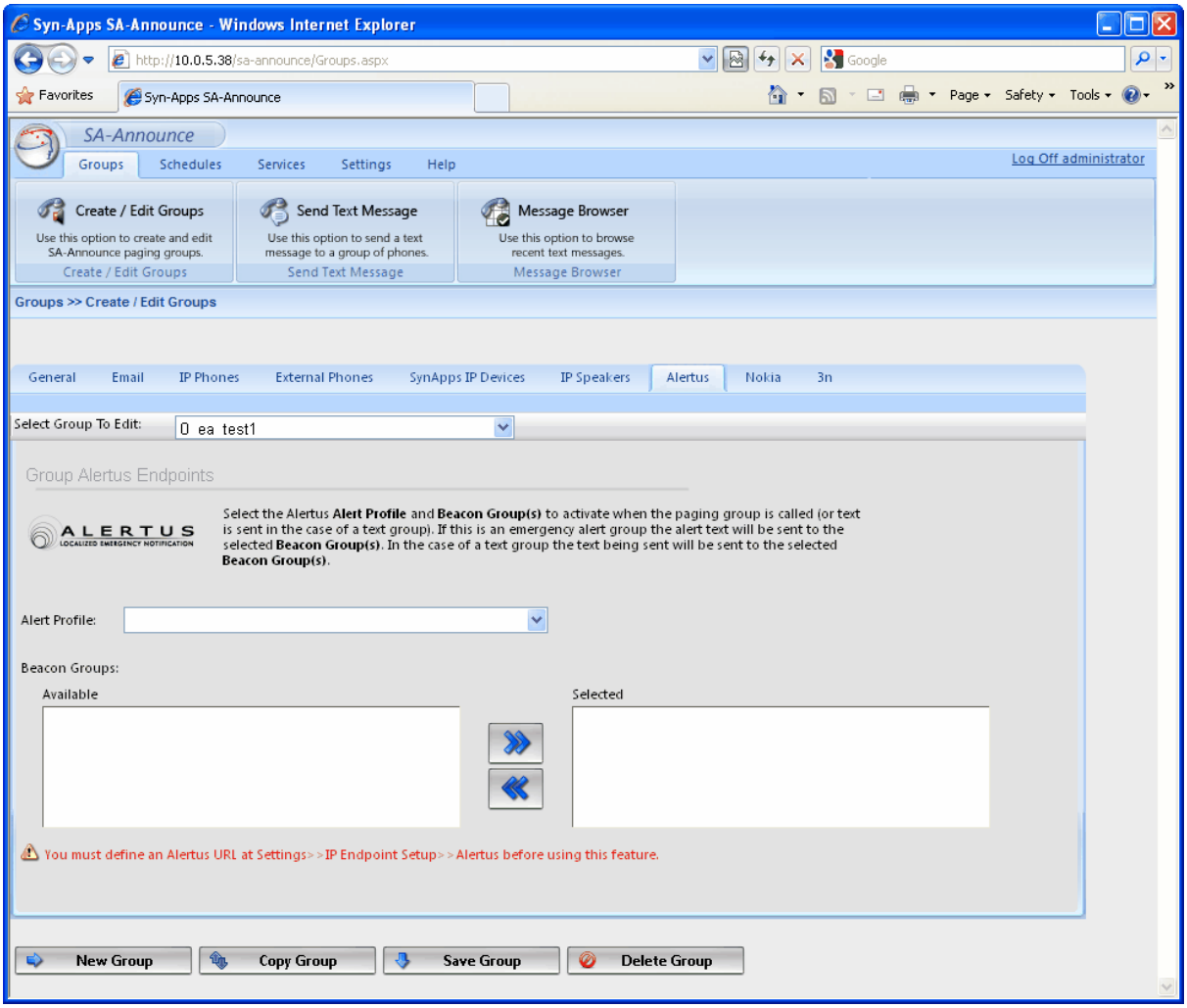
9.8 Alertus

Groups>>Create / Edit Groups: Alertus

This section describes how to add Alertus Beacon Groups to a SA-Announce notification group. The section Alertus Configuration must be completed before the Alertus tab will show configured **Alert Profiles** and **Beacon Groups**.

To add Alertus Beacon Groups to a SA-Announce notification group or schedule simply select the group in question, select an **Alert Profile** for the alert and select one or more **Beacon Groups** using the provided interface.


Syn-Apps SA-Announce - Windows Internet Explorer
http://10.0.5.38/sa-announce/Groups.aspx
Favorites
Syn-Apps SA-Announce
Page
Safety
Tools
SA-Announce
Groups
Schedules
Services
Settings
Help
Log Off administrator
Create / Edit Groups
Use this option to create and edit SA-Announce paging groups.
Send Text Message
Use this option to send a text message to a group of phones.
Message Browser
Use this option to browse recent text messages.
Groups >> Create / Edit Groups
General
Email
IP Phones
External Phones
SynApps IP Devices
IP Speakers
Alertus
Nokia
3n
Select Group To Edit:
0 ea test1
Group Alertus Endpoints
ALERTUS
Select the Alertus Alert Profile and Beacon Group(s) to activate when the paging group is called (or text is sent in the case of a text group). If this is an emergency alert group the alert text will be sent to the selected Beacon Group(s). In the case of a text group the text being sent will be sent to the selected Beacon Group(s).
Alert Profile:
Beacon Groups:
Available
Selected
You must define an Alertus URL at Settings>>IP Endpoint Setup>>Alertus before using this feature.
New Group
Copy Group
Save Group
Delete Group

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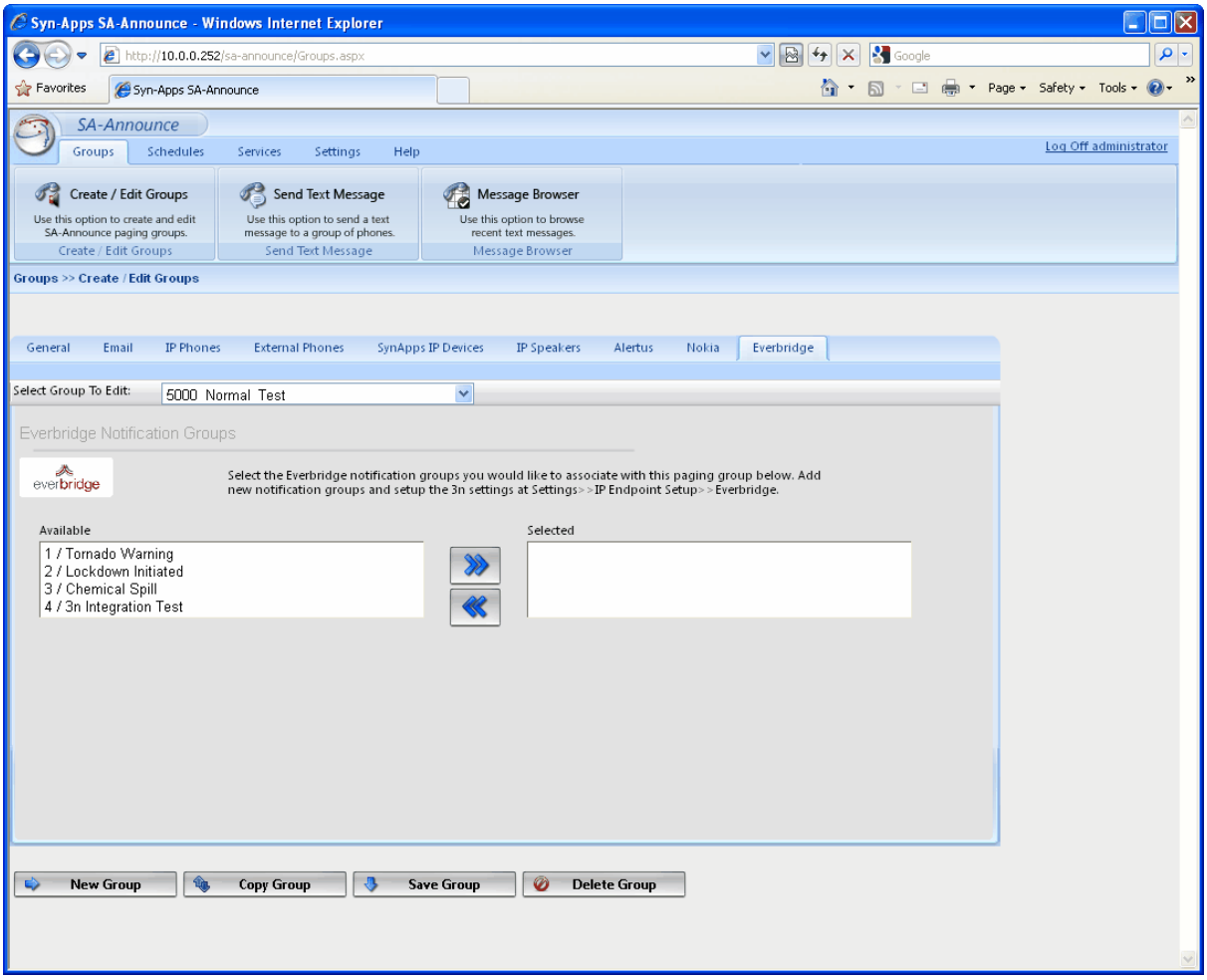
9.9 Everbridge

Groups>>Create / Edit Groups: Everbridge

This section describes the process of adding Everbridge **Scenarios** to SA-Announce notification groups. SA-Announce must be configured with the necessary parameters to contact the Everbridge system as described in the Everbridge Configuration section of this manual before the Everbridge Scenarios will appear on the groups page.

Once SA-Announce has been configured with the Everbridge system particulars you can add Everbridge Scenarios to a SA-Announce paging group by selecting the group in question on the **Groups>>Create / Edit Groups** page. Select the Everbridge tab and use the provided interface to add Scenarios to the notification group. Select one or more scenarios from the **Available** side of the list box and use the "**>>**" button to add them to the **Selected** side.



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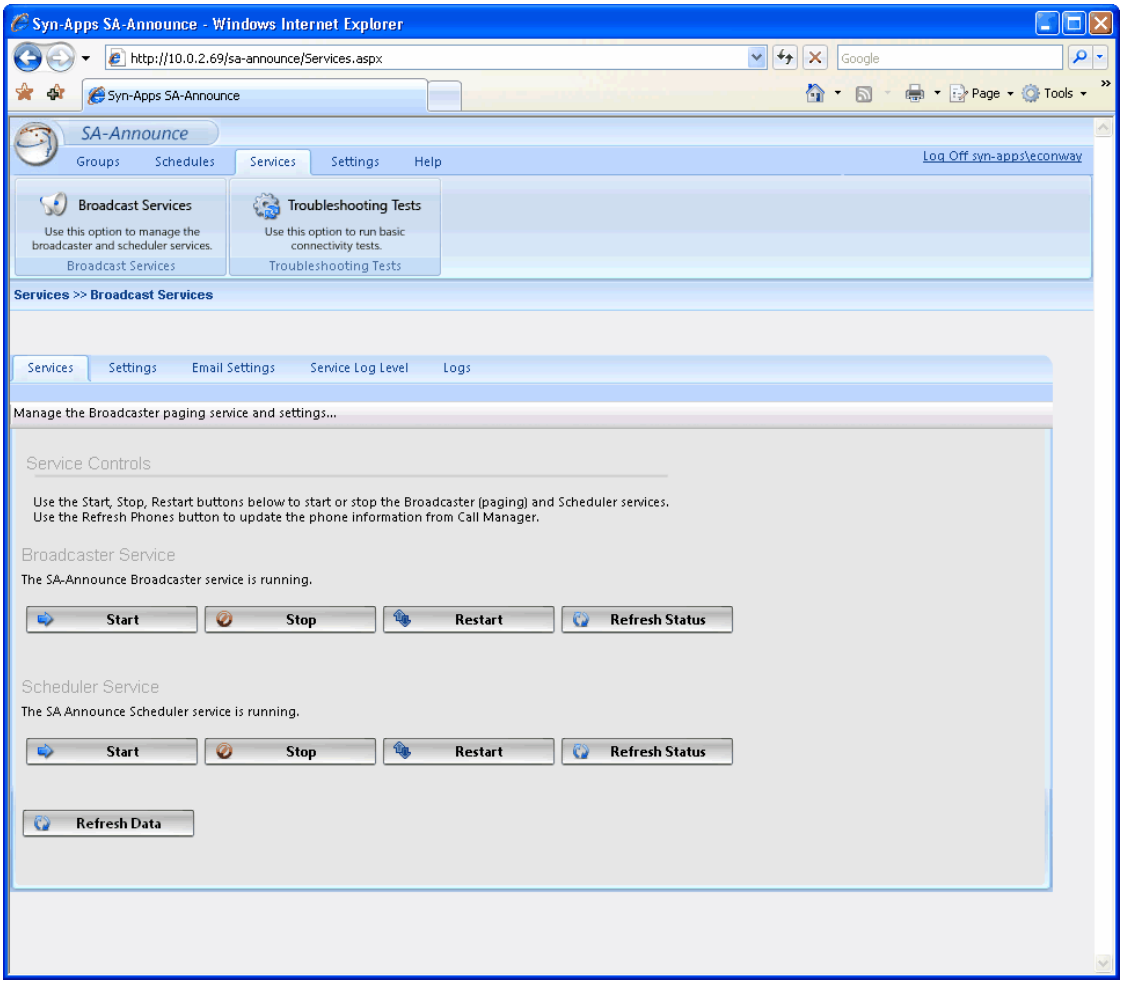
9.10 Activating Services

Services>>Broadcast Services: Services

Once you have created your first notification group you are ready to start the SA-Announce **Broadcaster Service**. If you are creating Schedules then both services must be running for the schedules to function properly (the Scheduler Service activates/uses the Broadcaster Service in this case).

Under the **Services** tab, click **Start** for the service in question.



You cannot start the services until you have set up the first notification group or schedule.

The **Refresh Data** button will update the SA-Announce database with the latest Communications Manager device info and Alertus info. Some of this info will not be “live” until the service is restarted.

The IP addresses of the phones are now automatically refreshed, however new phones/lines may still require a manual refresh. In this case, it is necessary to first **Refresh Phone Settings** followed by a **Restart** of the service. This is because the data is refreshed every two hours by default, so phones you have just added or IP addresses that have just changed will not automatically manifest in the SA-Announce notification system. This default timer can be lowered considerably if needed (dynamic deployments), the timer setting is stored in the registry of the application server (regedit: HKLM>Software>Syn-Apps>SA-Announce>refreshPhoneSettingsMinutes and change the default 120 to the new value and then restart the SA-Announce broadcaster service). Timer values below 5 minutes are not recommended for large installations (1500 phones and greater).

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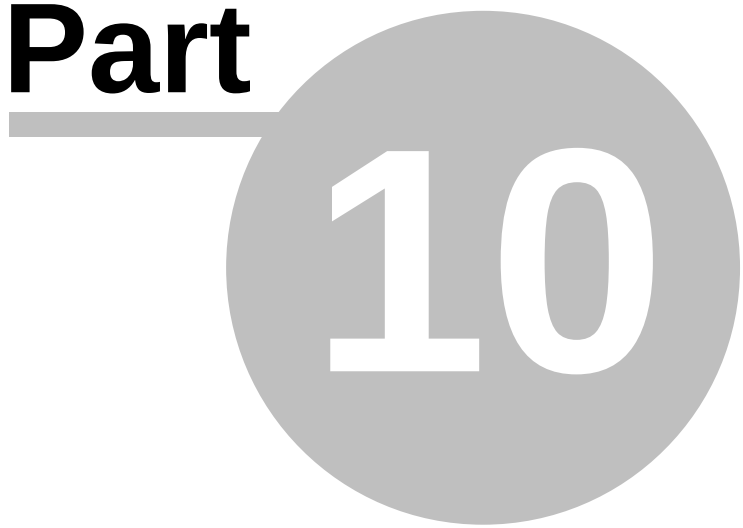
Creating Emergency Alert Groups



10 Creating Emergency Alert Groups

Groups>>Create / Edit Groups

This section describes the creation of SA-Announce Emergency Alert notification groups. The emergency alert group type is designed to be used for emergency notifications (e.g. Tornado Warning, School On Lockdown, etc). Emergency alert groups play wave files (which can be customized, use the **Schedules>>Wav File Upload** page) and send text to supported devices (Cisco IP Phones, Alertus and 3n end-points support text messages). With the inclusion of the **Send Caller-Id** checkbox the group becomes a very powerful emergency notification system as the security monitoring members can see who activated the emergency and respond accordingly.

The emergency alert notification group type has a number of different configuration options that are unique. The mode of an emergency alert group can be changed by selecting the provided check boxes in the emergency alert Settings area of the General tab (only one mode can be selected). **Alert Mode** is the default mode, in this mode the emergency alert group is activated when called (or via the web service possibly), the group will then send the text message to the supported devices and begin to play the wave file for 1000 cycles unless the group is called back. Calling an active emergency alert group in alert mode will cancel the emergency. **Voice Mode** groups will activate when called and play the wave file once at which point the source caller can begin to send further instructions by speaking into their handset, when the source caller hangs up the group terminates and text is cleared from the supported devices. The **Play Once** mode simply sets the duration of the emergency alert to one repeat of the wave file, after the wave file plays once the group will terminate and text will be cleared from the devices. Finally, selecting **Timed Mode** will expose a **Repeat Number** entry box, set the repeat number to the desired duration of the emergency alert group.

To create an Emergency Alert notification group perform the following:
Select **Groups>>Create / Edit Groups** from the main menu.
Click **New Group.**
Configure the following items:

- **Group Name:** Enter a descriptive name for the group, the group name will be displayed in the phone service menu and as the caller-id of the group.
  - **Group Type** - Select the **Emergency Alert** group type.
  - **Group Phone**:
    - **Line Number** - This is the extension that you will use to call (activate) the notification group, the next available line is placed in the field by default. Enter a unique line number here.
    - **Partition** - The partition the group phone should belong to (IE Phones must have a CSS containing this Partition to be able to dial the group).
    - **Device Pool** - Device pool the phone should belong to (the Device Pool must be set such that anyone calling the group gets a G711 codec lookup).

  - **Misc Settings**:
    - **Use Security Code** - To secure the group check this checkbox and enter a DTMF code to associate to the group.
    - **Send Caller-ID** - IP Phones within the selected group will receive the caller ID associated

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with the source phone line.
- **Emergency** - Busy detection overridden for this group, agents on a call will also receive the notification audio stream and/or text message.
- **Volume** - The volume of the IP Phone end-points in the group.

- **Tweet when activated**: Check this checkbox to send a status update to your Twitter account (See Twitter Configuration for setup details).
- **Notify Facebook Friends**: Check this checkbox to send a notification to Facebook friends who have authorized the SA-Announce Facebook application (See Facebook Configuration for setup details).
- **Amber Alerts**: Check this checkbox to send Amber Alerts to the groups IP Phones, Email, Alertus and 3n. A Zip Code is required but may or may not be used depending on the system settings. See Amber Alert Configuration for setup details.
- **Weather Alerts**: Check this checkbox to send Weather Alerts to the groups IP Phones, Email, Alertus and 3n. A Zip Code is required as weather alerts are localized. See Weather Alert Configuration for setup details.

- **Emergency Alert Settings:**
  - **Modes**: Alert Mode, Voice Mode, Play Once, Timed Mode. The modes are described at the top of this page.
  - **Wav File to Play**: Select the wave file to play when the group is activated. Add custom wave files to the system using the **Schedules>>Wav File Upload** page.
  - **Text to Send**: Enter the text to be sent with the emergency alert. The text will be sent to all end-points that support text messages.

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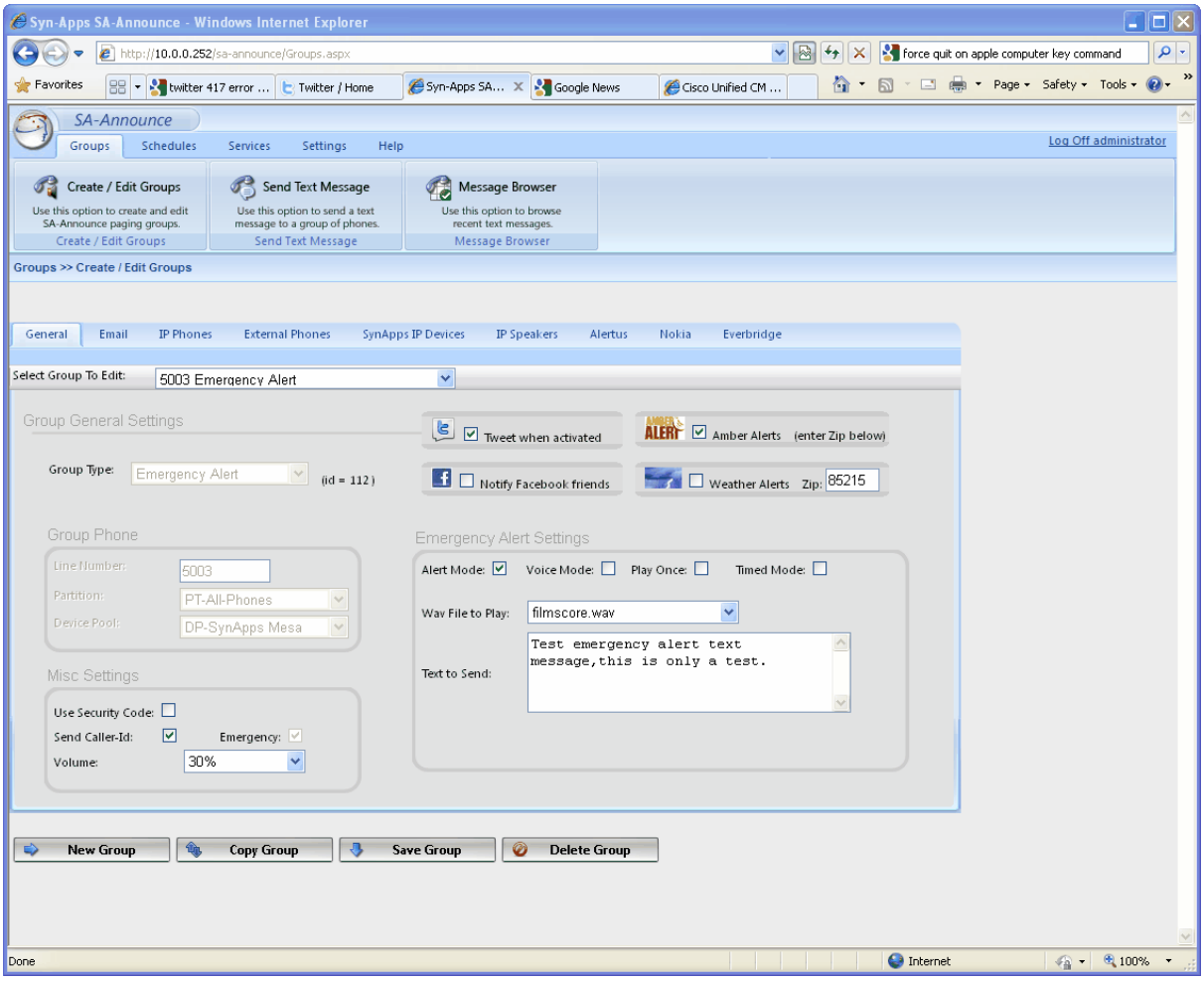

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The **Volume** drop down menu allows you to adjust the volume of the audio played on the phone speaker. The Default volume setting uses the setting of each phones speaker individually, other settings such as 90%, 80% etc override the current volume setting on the phone and forces the phone to play the audio at the percentage of maximum volume specified.

Please note that while this does affect the volume of phones it does not affect the volume of Valcom IP Speakers / CyberData IP Speakers / Legacy Overhead Systems / Alertus Endpoints.

Note: The **Amber Alerts** and **Weather Alerts** features will try to play the selected **Wav File** when sending the alert to IP Phones, but this Wav File may not be present on the CM TFTP server, in this case no sound will play along with the Amber Alert or Weather Alert, move the file to the TFTP server to allow it to play on the phones (this does not mean the sound will not play for an actual emergency alert, it will since it is streamed from our server). The Amber/Weather alerts are merged with emergency alert groups for convenience, they do not activate when you call the group to activate the alert, they activate when an Amber or Weather alert is in effect. In some cases where your emergency alert group has a custom wav file like "school on lockdown" you will not want to integrate the Amber Alerts and Weather Alerts with the group, instead create a new group for the Amber Alerts and Weather Alerts only.

[It is now possible to add the group even though end-points have not been associated yet, this can be done after adding the group (as presented in this manual) or before adding the group.]

Click **Add Group.** Once added, you are now free to add, remove and view information about specific devices within all of the groups that have been created.

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Creating Schedules

Part 11

11 Creating Schedules

Schedules>>Scheduled Broadcasts: General

This section describes the creation of SA-Announce schedules. Schedules are used to broadcast audio/text to predefined end-points at predefined times (e.g. school bell schedules, manufacturing break bells, etc). It is important to note that for schedules to function properly both the Scheduler service and the Broadcaster service must be running (See Activating Services). Also be aware that the scheduler is licensed separately from the broadcaster, contact sales@syn-apps.com for details.

To create a schedule perform the following:
Select **Schedules>>Scheduled Broadcasts: General** from the main menu.
Click **New Schedule.**
Configure the following items:

- **Schedule Name:** Enter a descriptive name for the schedule.
  - **Days to Play**: Select the days to play the schedule, one or more days may be selected.
  - **Times to Play**: Enter the times to play the schedule in 24 hour format (e.g. 4:00 pm >> 16:00).
  - **Sound to Play / Other Settings**:
    - **Sound to Play**: Select the wave file to play when the schedule is activated. Add custom wave files to the system using the **Schedules>>Wav File Upload** page.
    - **Volume** - The volume of the audio played by the IP Phone end-points in the schedule.
    - **Repeat**: The number of times to repeat the wave file when the schedule is activated.
    - **Text to Send**: Enter the text to be sent with the schedule. The text will be sent to all end-points that support text messages.
    - **Emergency** - Busy detection overridden for this group, agents on a call will also receive the notification audio stream and or text message.

The **Volume** drop down menu allows you to adjust the volume of the audio played on the phone speaker. The Default volume setting uses the setting of each phones speaker individually, other settings such as 90%, 80% etc override the current volume setting on the phone and forces the phone to play the audio at the percentage of maximum volume specified.
Please note that while this does affect the volume of phones it does not affect the volume of Valcom IP Speakers / CyberData IP Speakers / Legacy Overhead Systems / Alertus Endpoints.

[It is now possible to add the schedule even though end-points have not been associated yet, this can be done after adding the schedule or before adding the schedule.]

Click **Add Schedule.** Once added, you are now free to add, remove and view information about specific devices within all of the schedules that have been created.

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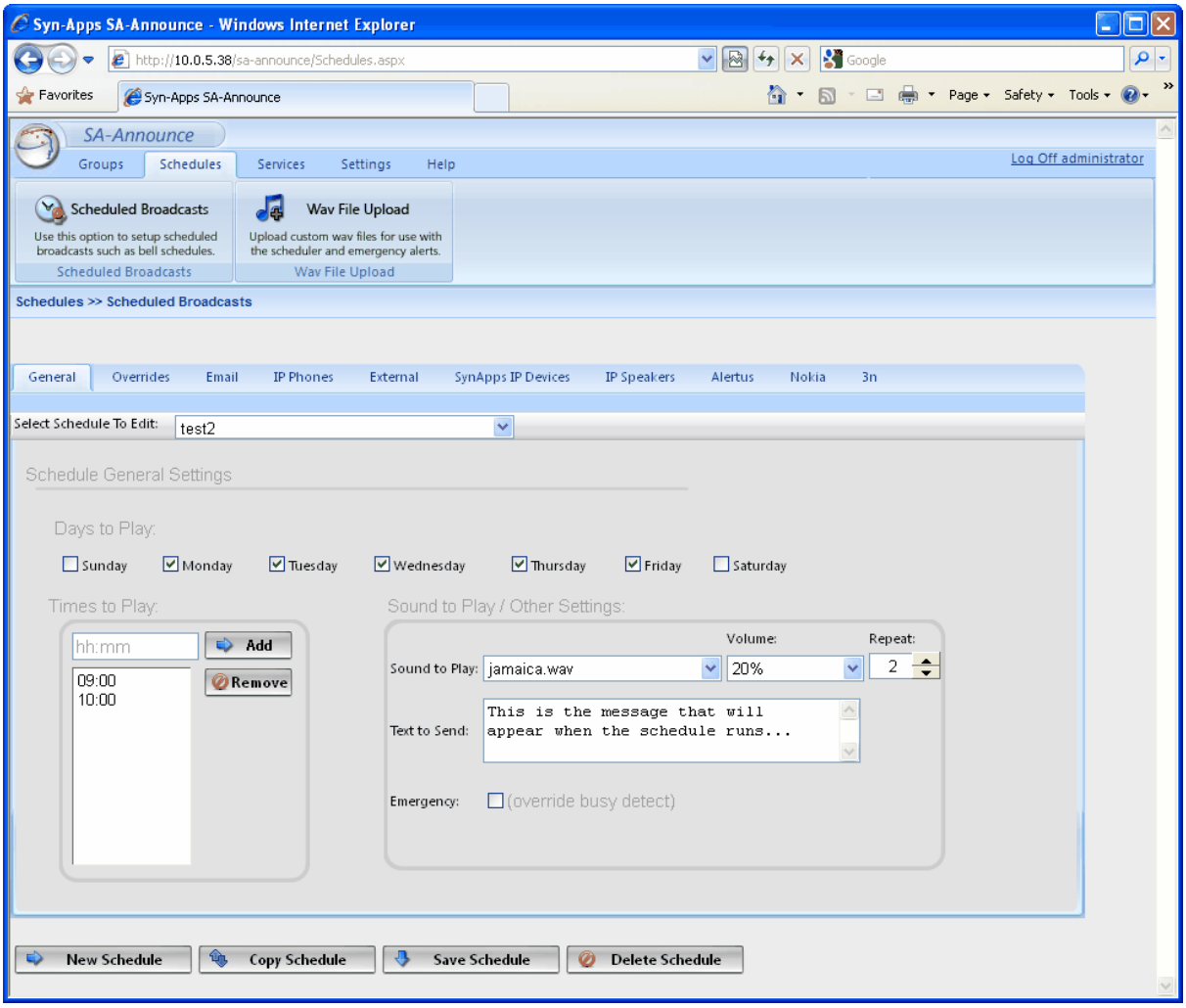

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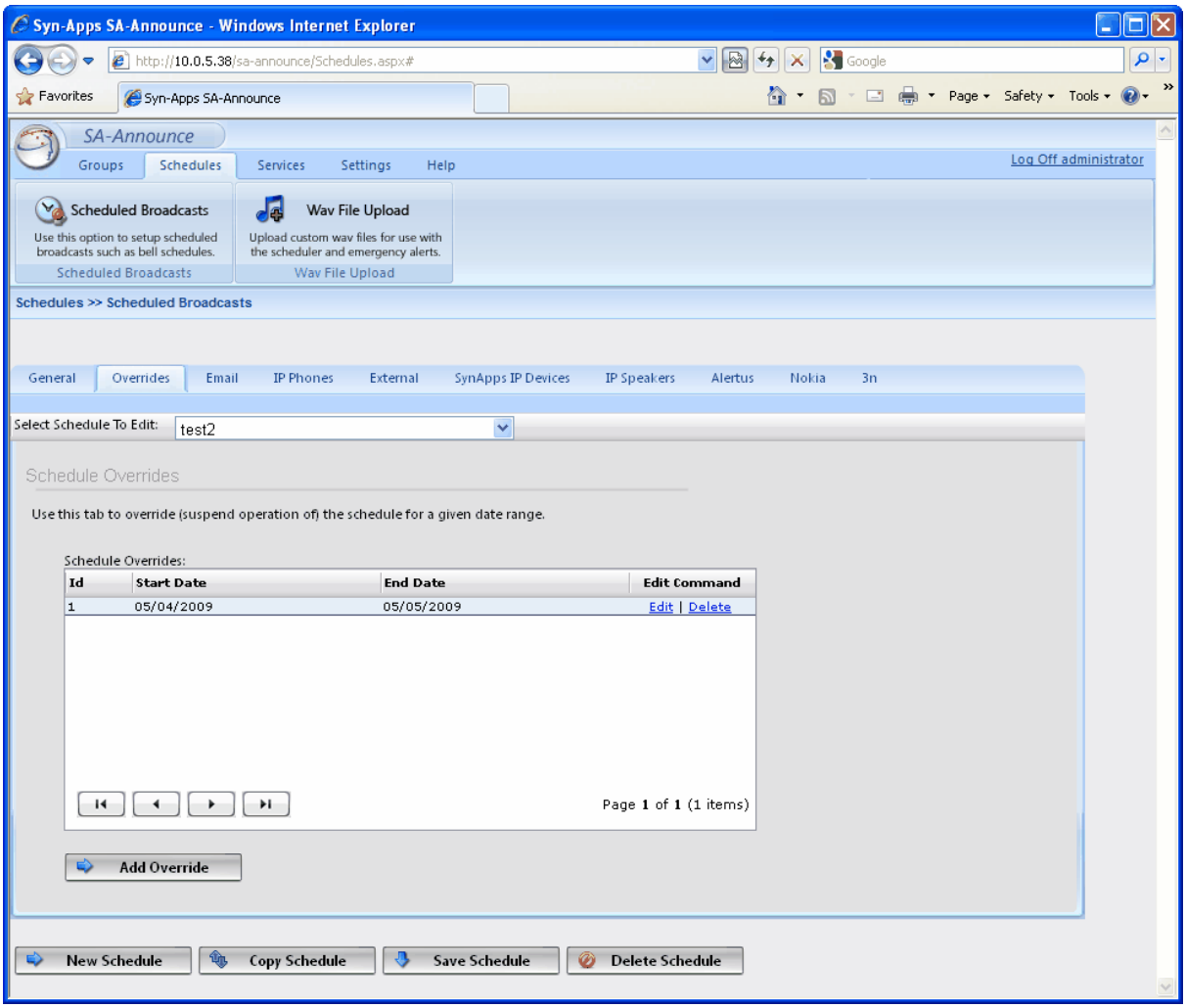
11.1 Schedule Overrides

Schedules>>Scheduled Broadcasts: Overrides

The Schedules>>Scheduled Broadcasts: Overrides tab is used to override the selected schedule for a given time span. If the schedule is overridden it will not play, this can be used to silence bells during vacation. Use the provided interface to add overrides, press the **Add Override** button to add a new override row which will appear in the table, press the **Edit** link for the row and use the provided calendars to select a **Start Date** and **End Date** for the override. Press the **Update** link to update the row changes.



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Sending A Text Message

12 Sending A Text Message

Groups>>Send Text Message: Send Text Message

To send a text message to a notification group you must first create a group that contains the required end-points. It can be an existing notification group of any type as long as that type allows you to select end-points (e.g. holler group types cannot be used for sending text messages). That is to say, even though Text type groups are only used on the Send a Message page, any group type that contains end-point associations will be listed on the send a message page. Note: If the group you select contains end-points that cannot display text, such as IP speakers, they will not receive the text message.

The Send Text Message page has had some major changes in revision 7.0.60, it now supports saving message templates (predefined text message groups). A message template is not required for sending a text message but is required for sending polls.

To send a text message:

- Browse to **Groups>>Send Text Message: Send Text Message**
- Choose the group that you want to send the text message to, by selecting from the **Use End-Points from Group** drop down menu.
- Select a **Sound Notification** to accompany the text message (the sound will only be played on the Cisco IP Phone end-points).
- Select an **Image** to send with the text message.
- Enter your text in the **Message to Send** field.

Press the **Send Message** button to send the message.

To send a poll:

- Browse to **Groups>>Send Text Message: Send Text Message**
- If the poll is already saved in a message template simply select the **Message Template to Edit** and press the **Send Message** button.
- If the poll is not already saved in a message template then create a **New Template** using the button.
- Choose the group that you want to send the text message to, by selecting from the **Use End-Points from Group** drop down menu.
- Select a **Sound Notification** to accompany the text message (the sound will only be played on the Cisco IP Phone end-points).
- Select an **Image** to send with the text message.
- Enter your text in the **Message to Send** field.
- Check the **Poll** checkbox under the Poll Options section and enter the poll answers in the provided fields.

Press the **Send Message** button to send the message. Tab to the **Poll Results Browser** tab to view poll results in real-time.

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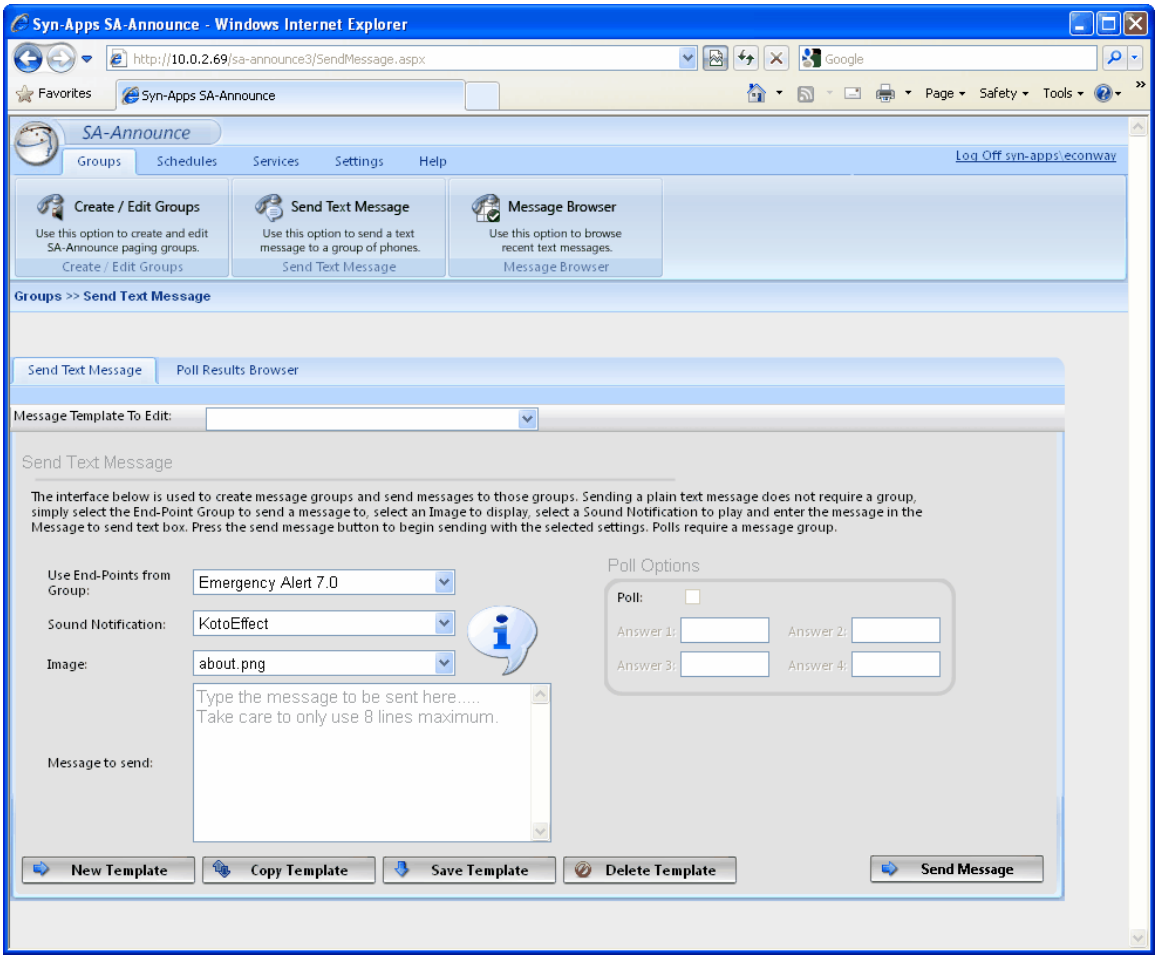
Syn-Apps SA-Announce - Windows Internet Explorer
http://10.0.2.69/sa-announce3/SendMessage.aspx
Google
Favorites
Syn-Apps SA-Announce
Page
Safety
Tools
SA-Announce
Groups
Schedules
Services
Settings
Help
Log Off syn-apps\econway
Create / Edit Groups
Use this option to create and edit SA-Announce paging groups.
Create / Edit Groups
Send Text Message
Use this option to send a text message to a group of phones.
Send Text Message
Message Browser
Use this option to browse recent text messages.
Message Browser
Groups >> Send Text Message
Send Text Message
Poll Results Browser
Message Template To Edit:
Send Text Message
The interface below is used to create message groups and send messages to those groups. Sending a plain text message does not require a group, simply select the End-Point Group to send a message to, select an Image to display, select a Sound Notification to play and enter the message in the Message to send text box. Press the send message button to begin sending with the selected settings. Polls require a message group.
Use End-Points from Group:
Emergency Alert 7.0
Sound Notification:
KotoEffect
Image:
about.png
Message to send:
Type the message to be sent here.....
Take care to only use 8 lines maximum.
Poll Options
Poll:
Answer 1:
Answer 2:
Answer 3:
Answer 4:
New Template
Copy Template
Save Template
Delete Template
Send Message

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12.1 Message Browser

Groups>>Message Browser

The **Groups>>Message Browser** page provides a table for viewing recently sent text messages. The message browser contains a row for each message that has been sent to a particular phone. The columns of each row contain the following information:

- **Message**:
  - **Message Body**: The message text that was sent.
  - **Sender**: The user that sent the text message followed by the group the message was sent to.
- **Posted**: The date and time the message was posted to the phones.
- **Sent To**:
  - **Desc**: The description field of the phone the message was sent to.
  - **Phone**: The name of the phone the message was sent to.
  - **IP**: The IP address of the phone the message was sent to.

To sort the list click on the column to sort by. To group items by a column, drag the column header (for the column to group on) into the light blue table header.

By default the last 30 days worth of messages are retained on the system. To change the retention value the registry must be edited, regedit: HKLM>Software>Syn-Apps>SA-Announce>messageRetentionDays, to the number of days you would like to retain messages. If the messageRetentionDays value does not exist at that location in the registry it can be added as a string value.

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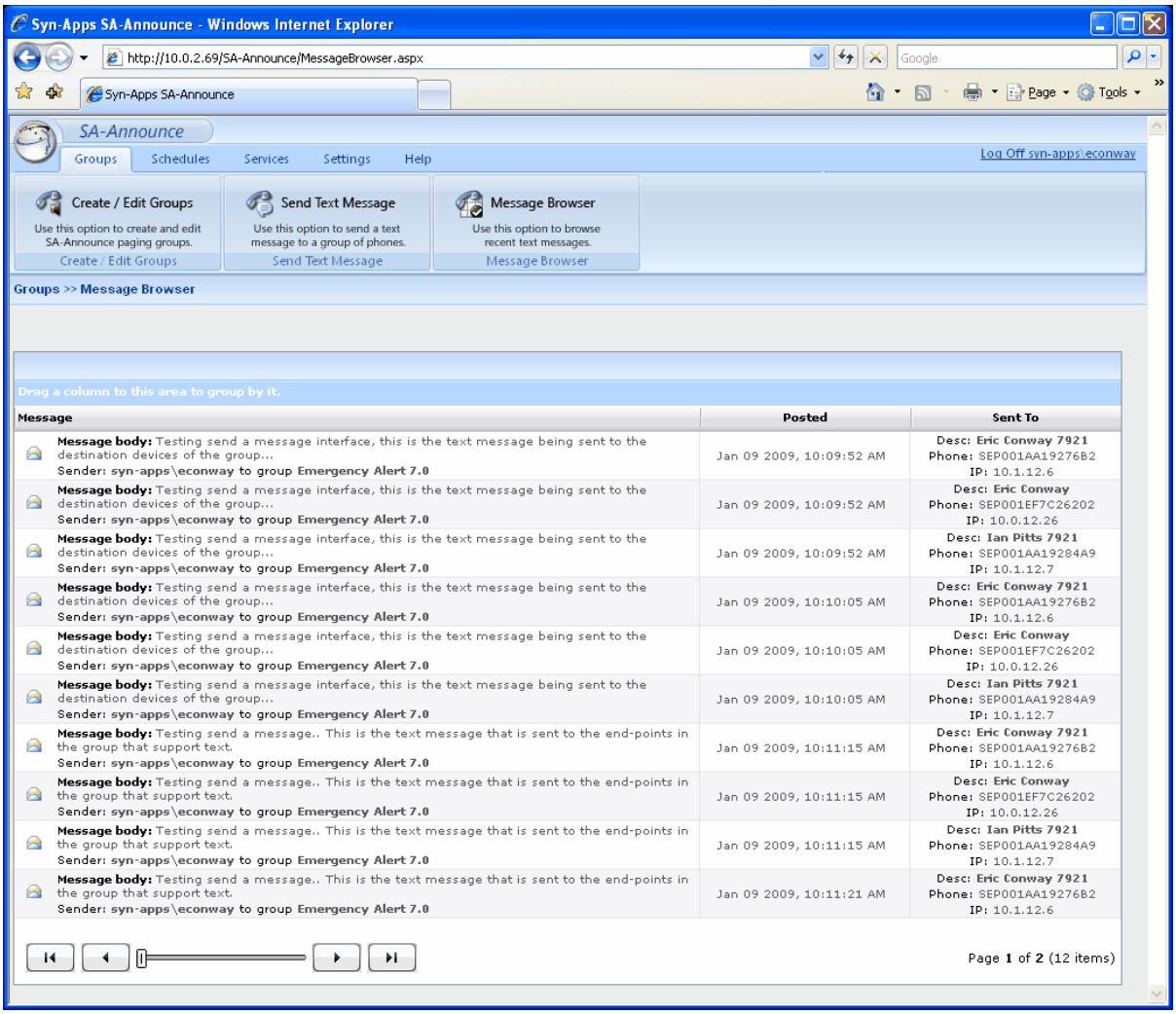
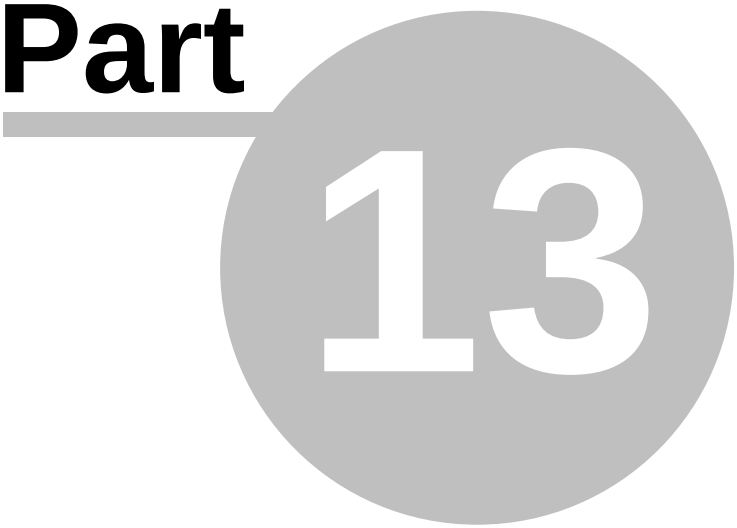

Syn-Apps SA-Announce - Windows Internet Explorer
http://10.0.2.69/SA-Announce/MessageBrowser.aspx
Syn-Apps SA-Announce
SA-Announce
Groups
Schedules
Services
Settings
Help
Log Off syn-apps\econway
Create / Edit Groups
Use this option to create and edit SA-Announce paging groups.
Send Text Message
Use this option to send a text message to a group of phones.
Message Browser
Use this option to browse recent text messages.
Groups >> Message Browser
Drag a column to this area to group by it.
Message
Posted
Sent To
Page 1 of 2 (12 items)

Email Settings



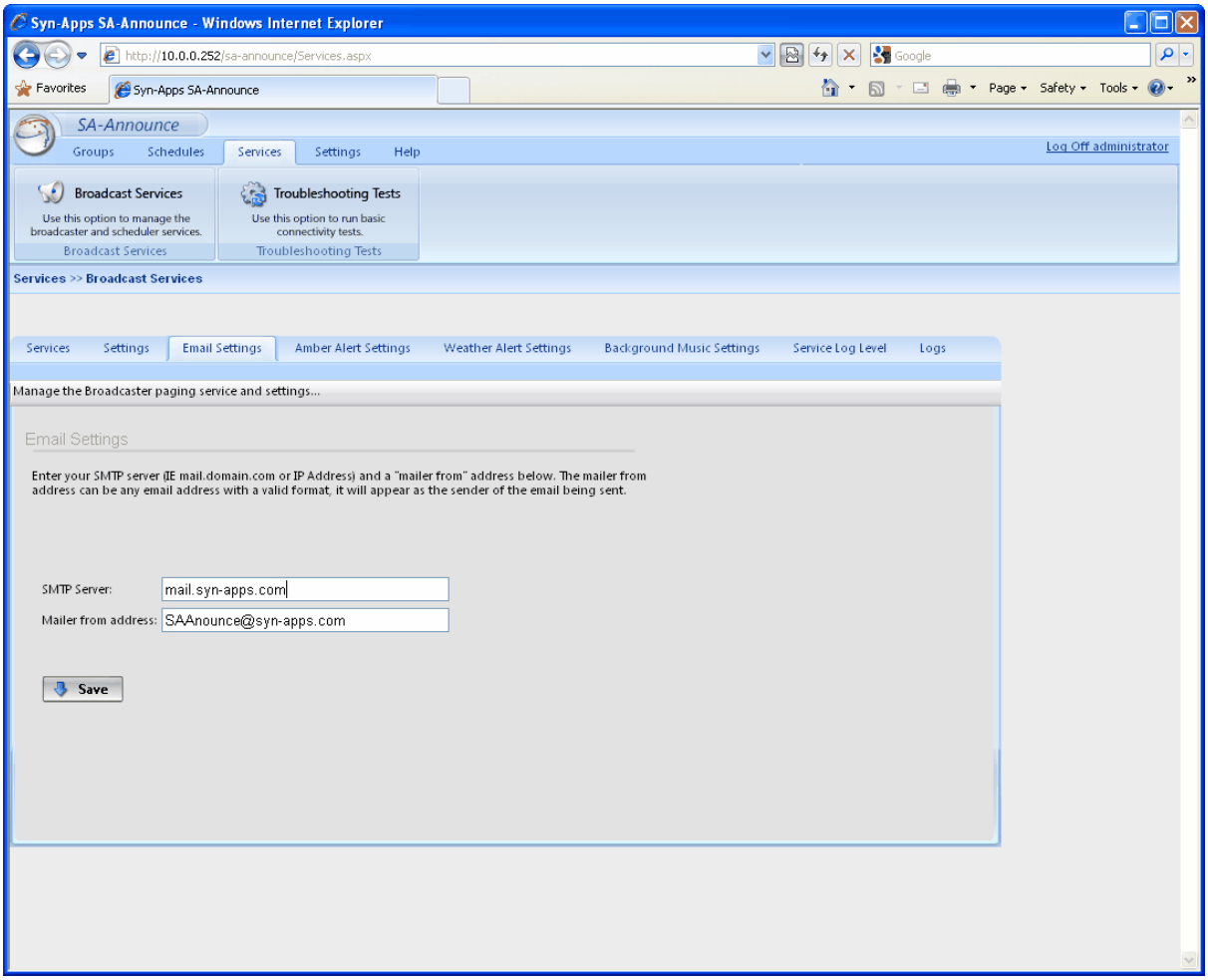
13 Email Settings

Services>>Broadcaster Service: Email Settings

In order for SA-Announce to send emails when groups are activated the **Services>>Broadcaster Service: Email Settings** tab must be filled out.

Enter an **SMTP Server** in the provided text box and a **Mailer from address** and press the **Save** button to save the changes.

SA-Announce will now be able to send emails when groups that have email destinations are activated.



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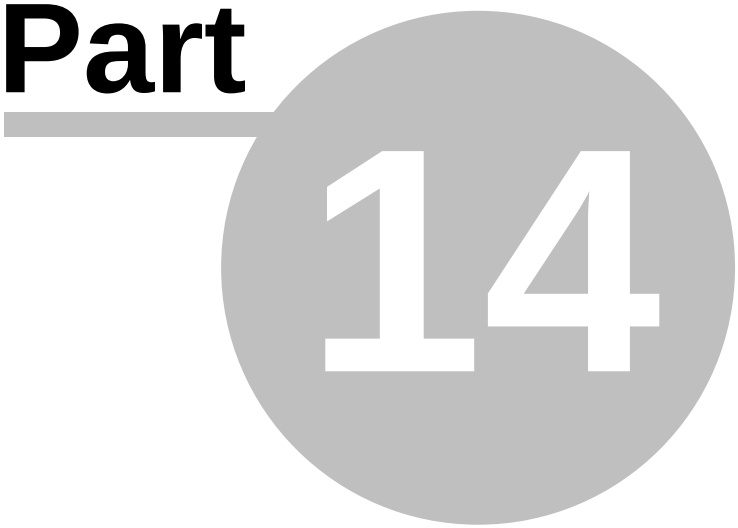
Amber Alert Settings



14 Amber Alert Settings

Services>>Broadcaster Service: Amber Alert Settings

The AMBER Alert Program is a voluntary partnership between law-enforcement agencies, broadcasters, transportation agencies, and the wireless industry, to activate an urgent bulletin in the most serious child-abduction cases. The goal of an AMBER Alert is to instantly galvanize the entire community to assist in the search for and the safe recovery of the child.

To utilize AMBER Alerts the SA-Announce application server must have internet access to www.codeamber.org.

The AMBER Alert service runs inside the broadcaster service as it is coupled to emergency alert groups. This coupling is for multiple reasons but primarily due to the need to have an endpoint association for notifications. It is important to understand that the AMBER Alerts do not activate as a result of calling the emergency alert group, in this case the normal emergency alert functionality is carried out. Once you have activated AMBER Alerts by checking the Amber Alert checkbox for a particular group and saving the changes, alerts will be active as long as the broadcaster service is running. The service checks for new alerts immediately as the service is restarted and then checks again when the "new alert" interval setting is reached. It is important to have a low "new alert" interval setting so you will be notified of new alerts shortly after they occur. The "resend alert" interval setting controls how often active alerts are resent to the group endpoints.

The settings for the Amber Alert service are listed on the Amber Alert Settings tab.

- **Check for new alerts every (minutes)**: This setting controls how often the service checks for Amber Alerts. 10 minutes is the minimum and the default.
- **Resend active alerts (minutes)**: This setting controls how often alerts are resent. 0 minutes is the default which means you will only receive AMBER Alerts once per update, the alert will not be resent while active unless a duration is entered here. IE to send alerts every 4 hours while they are active enter 240 for the resend value. Note that emails are never resent.
- **Send alerts regardless of zip code**: This setting controls the localization of Amber Alerts. If the setting is unchecked you will only receive Amber Alerts that originated in your state. The setting is on by default which means you will receive all Amber Alerts regardless of the state they originated in.

- **Send endangered children "CANS" alerts**: This setting controls wether Code Amber News Service (CANS) endangered children alerts are sent. These are missing or endangered children alerts that have not been deemed AMBER Alerts. The default setting is checked (on).

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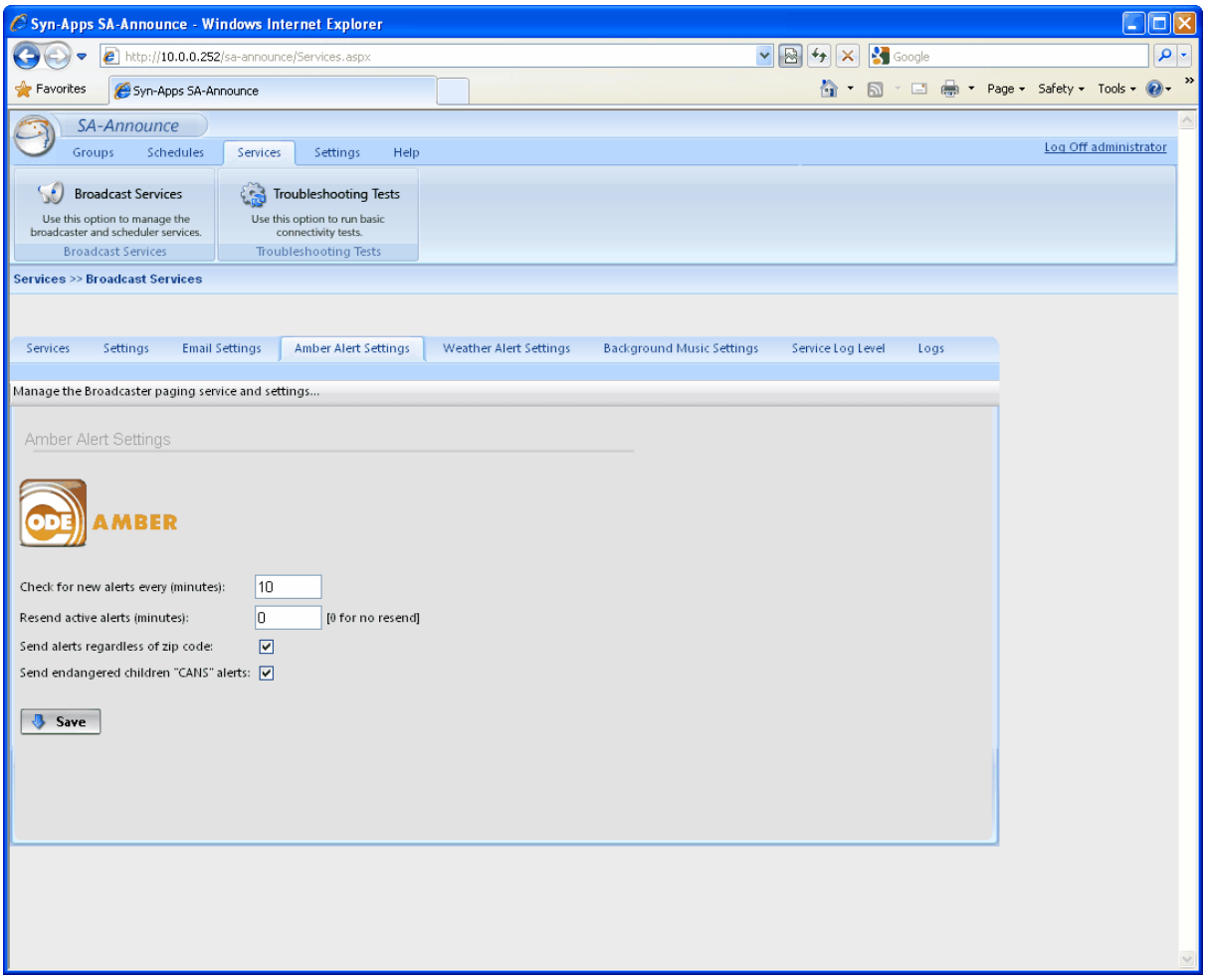
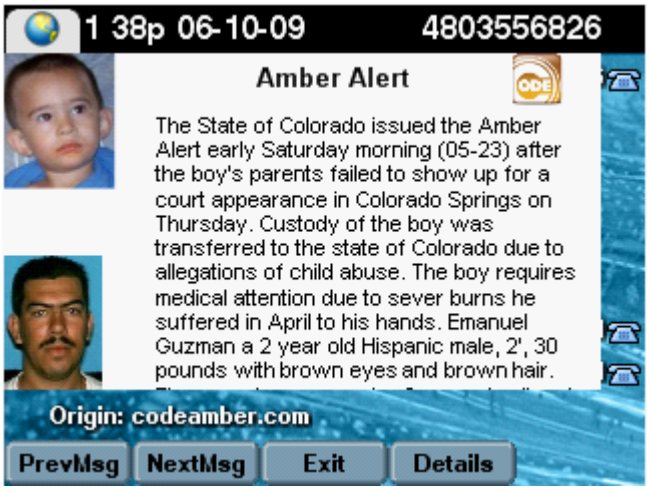


Sample Amber Alert:


1 38p 06-10-09
4803556826
Amber Alert
The State of Colorado issued the Amber Alert early Saturday morning (05-23) after the boy's parents failed to show up for a court appearance in Colorado Springs on Thursday. Custody of the boy was transferred to the state of Colorado due to allegations of child abuse. The boy requires medical attention due to sever burns he suffered in April to his hands. Emanuel Guzman a 2 year old Hispanic male, 2', 30 pounds with brown eyes and brown hair.
Origin: codeamber.com
PrevMsg
NextMsg
Exit
Details

*Press the Details button to see the complete text message, or visit http://codeamber.com in a web browser.

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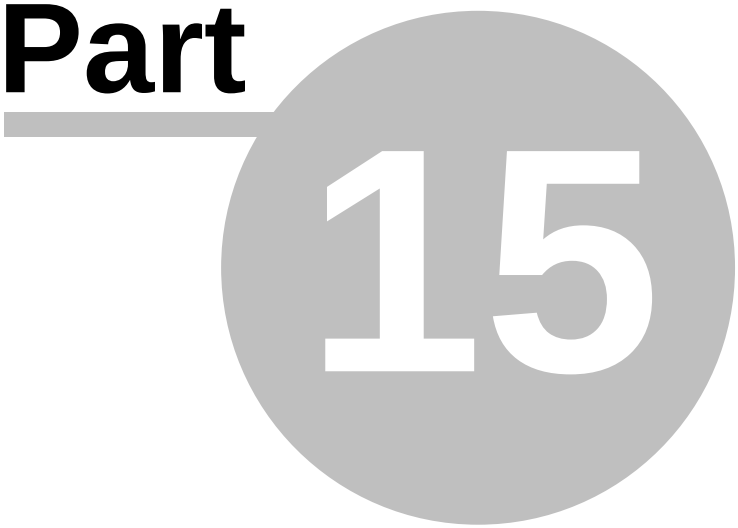
Weather Alert Settings



15 Weather Alert Settings

Services>>Broadcaster Service: Weather Alert Settings

The Weather Alert service uses the National Weather Service web service to gather alert data for the zip code specified by the emergency alert groups that have the feature activated.

To utilize Weather Alerts the SA-Announce application server requires internet access to www.weather.gov.

The Weather Alert service runs inside the broadcaster service as it is coupled to emergency alert groups. This coupling is for multiple reasons but primarily due to the need to have an endpoint association for notifications. It is important to understand that the Weather Alerts do not activate as a result of calling the emergency alert group, in this case the normal emergency alert functionality is carried out. Once you have activated Weather Alerts by checking the Weather Alert checkbox for a particular group and saving the changes, alerts will be active as long as the broadcaster service is running. The service checks for new alerts immediately as the service is restarted and then checks again when the "new alert" interval setting is reached. It is important to have a low "new alert" interval setting so you will be notified of new alerts shortly after they occur. The "resend alert" interval setting controls how often active alerts are resent to the group endpoints.

The Weather Alert Settings section contains interval timer settings:

- **Check for new alerts (minutes)**: This setting controls how often the service checks for Weather Alerts. 10 minutes is the minimum and the default.
- **Resend active alerts (minutes)**: This setting controls how often alerts are resent. 120 minutes is the default which means you will receive a weather alert every two hours while the alert is in effect. To disable the resend enter 0. Note that emails are never resent.

The Weather Alert Settings section also contains an area to configure which weather Watches, Warnings and Advisories to send alerts for. By default only the most severe weather alerts are activated. This is not to say that the other alerts are not just as important, they can be depending on where you are located. For that reason the list should be checked over and any alerts that may apply to your geographical location should be enabled (simply select the item from the available side of the list and press the >> button to move the item to the selected side).

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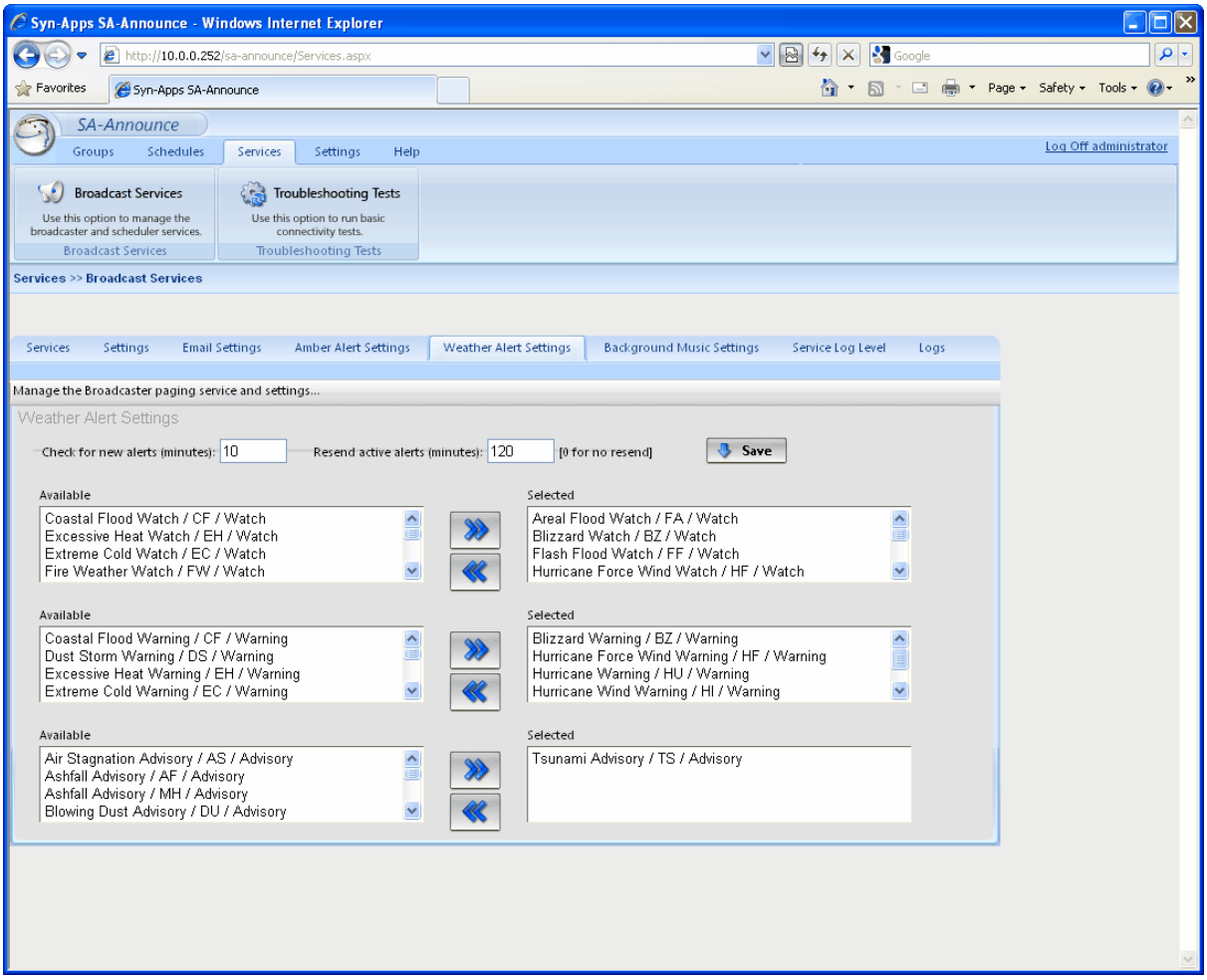
Syn-Apps SA-Announce - Windows Internet Explorer
http://10.0.0.252/sa-announce/Services.aspx
Syn-Apps SA-Announce
SA-Announce
Groups
Schedules
Services
Settings
Help
Log Off administrator
Broadcast Services
Use this option to manage the broadcaster and scheduler services.
Troubleshooting Tests
Use this option to run basic connectivity tests.
Services >> Broadcast Services
Services
Settings
Email Settings
Amber Alert Settings
Weather Alert Settings
Background Music Settings
Service Log Level
Logs
Manage the Broadcaster paging service and settings...
Weather Alert Settings
Check for new alerts (minutes): 10
Resend active alerts (minutes): 120
[0 for no resend]
Save
Available
Coastal Flood Watch / CF / Watch
Excessive Heat Watch / EH / Watch
Extreme Cold Watch / EC / Watch
Fire Weather Watch / FW / Watch
Selected
Areal Flood Watch / FA / Watch
Blizzard Watch / BZ / Watch
Flash Flood Watch / FF / Watch
Hurricane Force Wind Watch / HF / Watch
Available
Coastal Flood Warning / CF / Warning
Dust Storm Warning / DS / Warning
Excessive Heat Warning / EH / Warning
Extreme Cold Warning / EC / Warning
Selected
Blizzard Warning / BZ / Warning
Hurricane Force Wind Warning / HF / Warning
Hurricane Warning / HU / Warning
Hurricane Wind Warning / HI / Warning
Available
Air Stagnation Advisory / AS / Advisory
Ashfall Advisory / AF / Advisory
Ashfall Advisory / MH / Advisory
Blowing Dust Advisory / DU / Advisory
Selected
Tsunami Advisory / TS / Advisory

Sample Weather Alert:

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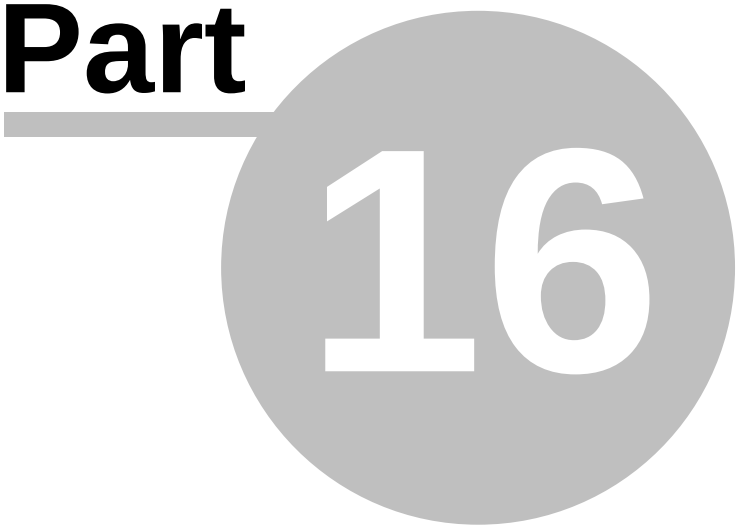
Background
Music Settings



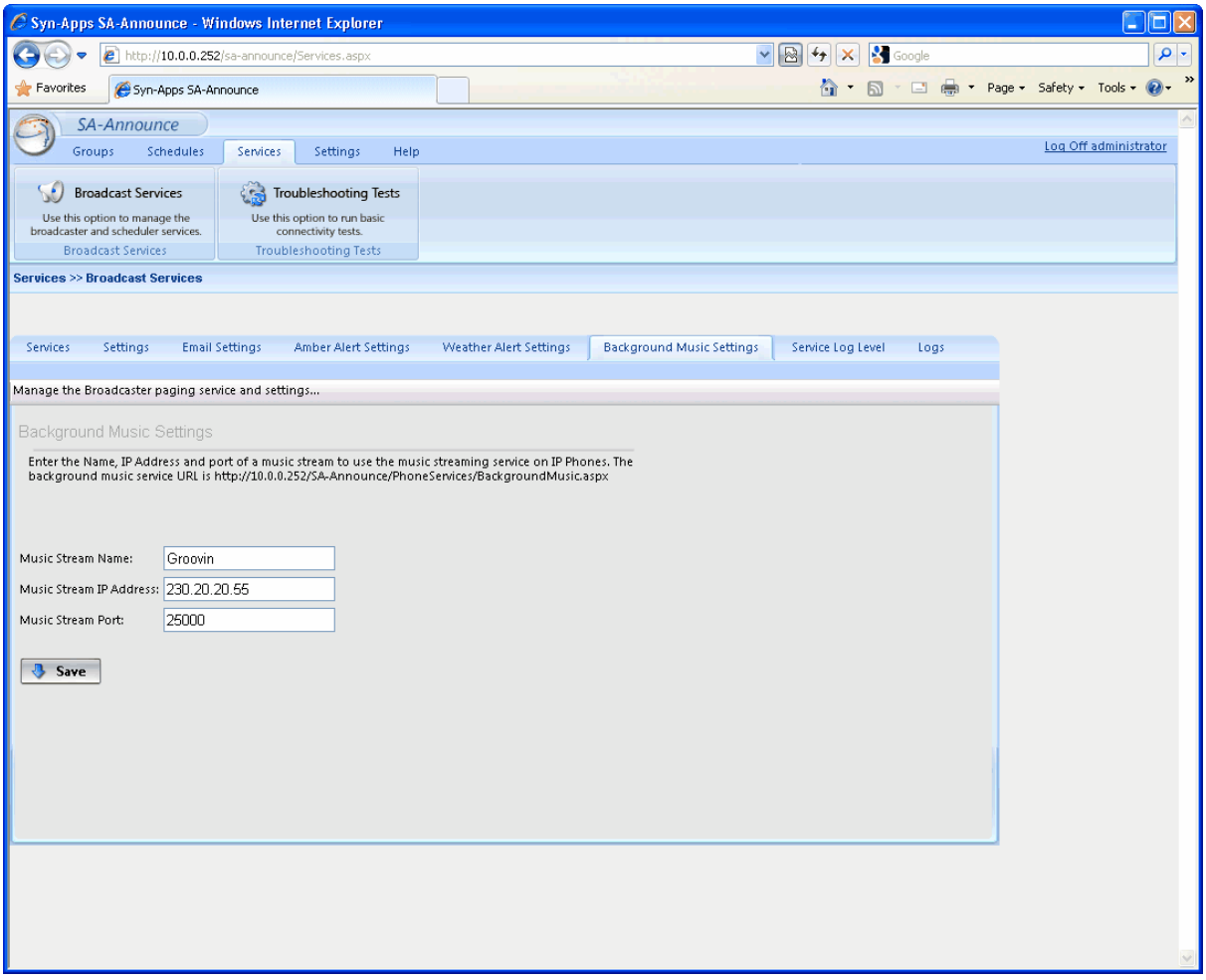
16 Background Music Settings

Services>>Broadcaster Service: Background Music Settings

The Background Music Settings section is used to configure the background music service parameters. Use of this service requires a multicast music streaming source (IE Syn-Apps Paging Relay or similar). Once the streaming source is active, add the settings on the Background Music Settings page and then add a phone service on CUCM with the following URL: http://sa-announce-server-address/sa-anounce/phoneservices/BackgroundMusic.aspx. Finally, subscribe phones to the service. Subscribed phones can activate the background music by selecting Services and then the name you used when adding the phone service.

The Background Music Settings section contains the following settings:

- **Music Stream Name**: This setting controls the display name of the music stream (it will appear on phones accessing the stream).
- **Music Stream IP Address**: Enter the IP Address of the multicast background music stream (224.X.X.X -> 239.X.X.X).
- **Music Stream Port**: Enter the port of the multicast background music stream (RTP ports only 24000 -> 36000).



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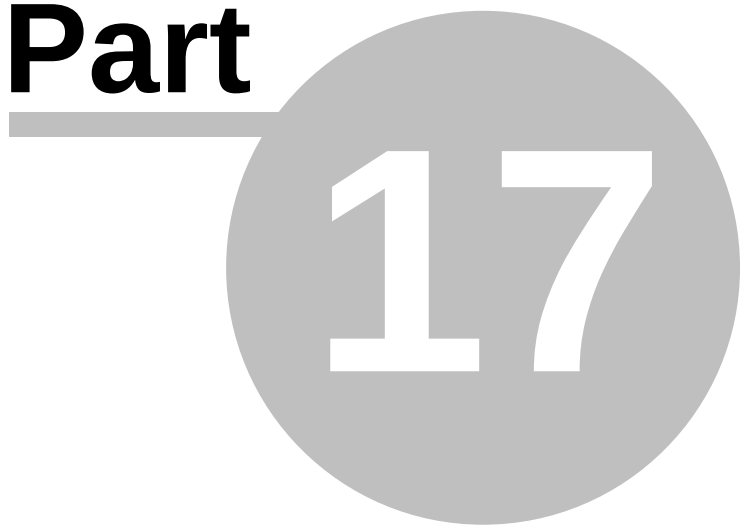
Configure IP Phone Services



17 Configure IP Phone Services

SA-Announce provides two IP phone services and a number of advanced configuration options to facilitate phone sourced multicasting. The following chapters describe these configuration options.

1. SA-Announce Directory Service
   This service provides a phone directory of notification groups defined within SA-Announce. In this case the selected group is activated by programmatic dialing of the group phone.

2. SA-Announce Web Dialer Service
   This service is used to display and activate Normal, Holler, and Wokkie-Tokkie page groups. In this case, rather than calling a phone number, the group activation is done via the web to allow phone sourced multicasting from any supported Cisco phone. Note that in this mode hooking the source phone will not shut down the group, the "**End Page**" soft-key must be pressed to properly shut down the notification group.

3. 7921 Push to Talk
   The 7921 push to talk button can be used with SA-Announce Wokkie-Tokkie (walky talky emulator) type groups. the push to talk button can also be used to activate a particular group.

4. Phone Service URL
   This section describes the process of adding a Service URL to an IP Phone line button. It is possible to reconfigure the phone button template such that a line button (e.g. speed dial) becomes a Service URL (direct access to a web URL). The Service URL can be used to activate the Web Dialer directory or activate a specific group via the web. This is useful as it can provide phone sourced local multicasting at a site located across the WAN from the main (SA-Announce server) site.

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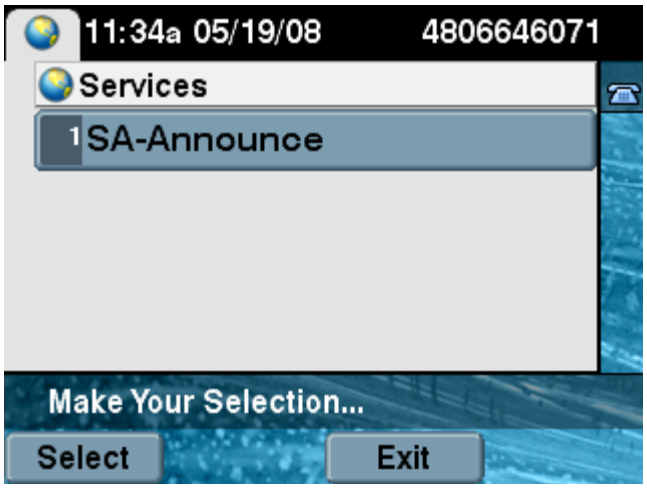
17.1 Page Group Directory

The **SA-Announce phone service** is used to display a directory of configured notification groups on the Cisco IP Phones. In order to use SA-Announce group directory you must define the IP phone service.

Create a new IP phone service (CUCM Admin: Device>>Device Settings>>Phone Services) with the following parameters:
Service Name = SA-Announce
Service URL = http://server-ip-address/phoneservices/groupsdirectory.aspx where server-ip-address equals your SA-Announce server's IP address.

*Note: By default the Group Directory provides a list of all groups. To show only groups that the accessing phone is a member of use the following Service URL:
Service URL = http://server-ip-address/phoneservices/groupsdirectory.aspx?showAll=true.

Once your IP phone service is created, you must subscribe the desired phone(s) to the service. Once phones are subscribed to the service use the Services button on the phone and select the SA-Announce service to enter the directory. After accessing the service from a phone, you will see the following:



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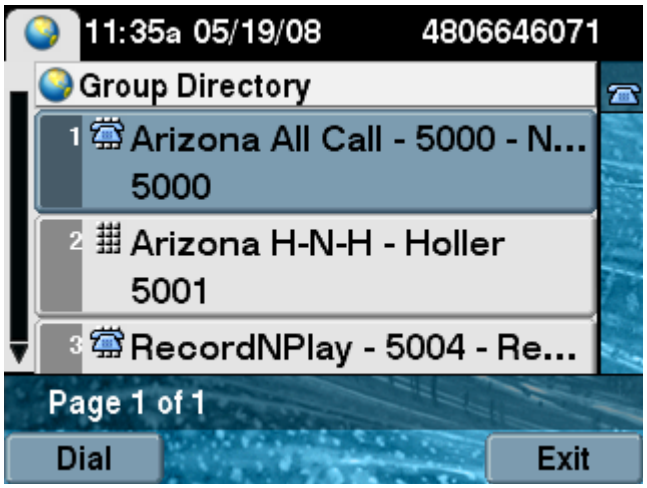

Select the desired page groups and press DIAL to initiate the page.

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17.2 Web Dialer Directory

The SA-Announce web dialer service is used to initiate phone sourced multicast notifications. In order to use the SA-Announce web dialer directory you must define the IP phone service.

Create an IP phone service with the following parameters:
Service Name = SA-Announce Web Dialer
Service URL = http://server-ip-address/phoneservices/webgroups.aspx where server-ip-address equals your SA-Announce server's IP address.

*Note: By default the Web Dialer Directory provides a list of all groups that can be web dialed. To show only groups that the accessing phone is a member of use the following Service URL:
Service URL = http://server-ip-address/phoneservices/webgroups.aspx?showAll=true.

Once your IP phone service is created, you must subscribe the desired phone(s) to the service. After accessing the services panel from a subscribed phone, you will see the following:

Select the desired page group and press SELECT to initiate the page.

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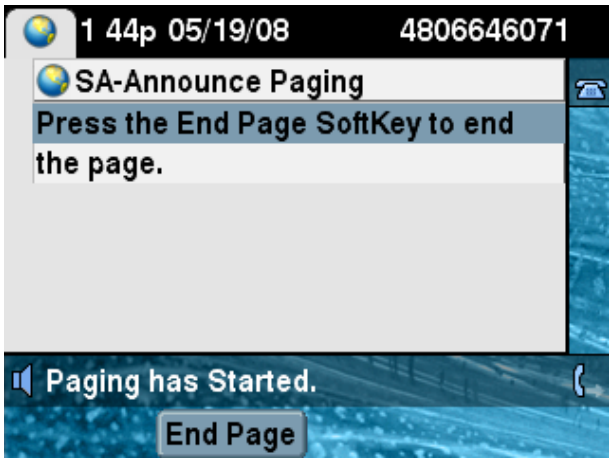

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17.3 7921 - Push-to-Talk

To utilize the push-to-talk button on the 7921 wireless phone you must setup a SA-Announce Wokkie-Tokkie group and then activate it using the Web Dialer methodology. In this case the push-to-talk button will control the audio stream coming from the 7921. For example, click the push-to-talk button to activate the group, then hold the push-to-talk button down to talk. Release the button when done speaking. Note: The source caller must end the page using the "**End Page**" soft-key provided on the source phone.

Furthermore, it is possible to set the 7921 push-to-talk button to activate a specific group. In this case you would set the Application URL of the 7921 (Communication Manager Admin>Device>Phone) to point to the following URL: http://server-ip-address/SA-Announce/PhoneServices/GetParams.aspx?id=<group-id> Where server-ip-address is the IP address of the SA-Announce server and <group-id> is the group-id as shown on the SA-Announce web administration groups page.

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17.4 Phone Service URL

This section describes the process of adding a Service URL to an IP Phone line button. It is possible to reconfigure the phone button template such that a line button (e.g. speed dial) becomes a Service URL (direct access to a web URL). The Service URL can be used to activate the Web Dialer directory or activate a specific group via the web. This is useful as it can provide phone sourced local multicasting at a site located across the WAN from the main (SA-Announce server) site.

Create a new IP Phone service that will be assigned to the Service URL button on the source phones

Create a new IP Phone service in CCMAdmin with the following parameters.

- Service Name = you can call the group whatever you like, suggest that it is left generic as this service will be used for all sites and multiple destination groups.
- Service Description = something to remind you what to use this service for.
- Service URL = **http://x.x.x.x/SA-Announce/PhoneServices/GetParams.aspx -** Make sure you replace the x.x.x.x with the ip address of your SA-Announce server.

Save the service and then add a Service Parameter with the following parameters.

- Parameter Name = id
- Parameter Display Name = Group ID
- Parameter Description = something meaningful to you
- Check “Parameter is Required” at the bottom
- Click “Update" and "Close" at the top of the web page

Before the next step make sure that the phone button template on the destination device has a “ Service URL” defined

Get the Group ID for the destination group from SA-Announce

- Open the SA-Announce web interface
- Navigate the “Groups” page
- Select the desired destination group from the drop-down box
- Make sure the “General” tab is selected and look in the right corner of the tab for “Group ID”
- Make a note of this ID you will need it in the next step

Subscribe the phones that have access to this group to the IP Phone service

- Open the destination phone in CCMADMIN
- Click on the “**Subscribe/Unsubscribe Services**” hyperlink in the upper right
- Select the service created in the first step
- Enter the ID noted in the previous step in the Group ID parameter
- Save and update

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Add the Service URL Button to the phone

- Navigate back to the device configuration page for the same phone above
- Click “Add/Update Service URL Buttons” and select the service name that you just subscribed to
- Save and Update and then restart the phone

Once you complete the steps above you can use this service for all phones in the company regardless of the destination group.
Simply replace the Group ID with the destination page Group ID that phone requires.
Once the phone is restarted you should see the button on the right configured with the Service Name.

Important:

Users must press the button to initiate the page and then lift the receiver or they will initiate a new call.

Users must end the page by pressing the softkey on the phone labeled “End Page”

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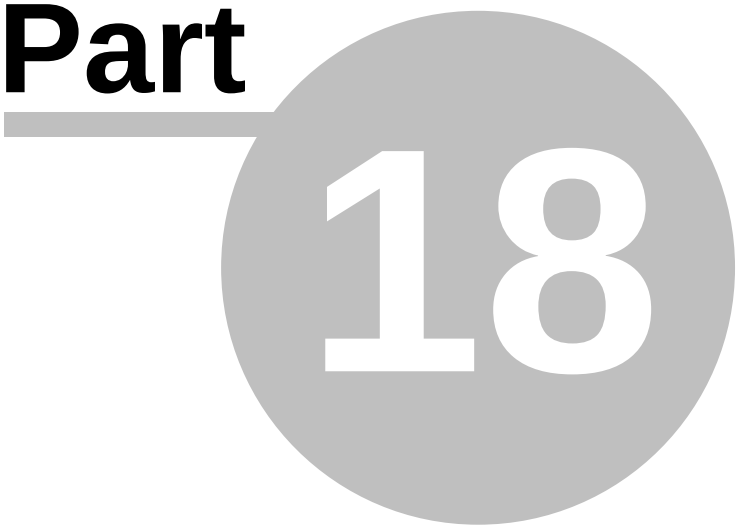
Paging Relay Configuration



18 Paging Relay Configuration

Settings>>IP Endpoint Setup: Syn-Apps IP

The **Settings>>IP Endpoint Setup: Syn-Apps IP** tab is used to view and configure the Paging Relay parameters. For information on adding Paging Relays to a SA-Announce notification group see the Syn-Apps IP Devicessection.

The Control Port is set to 6789 by default. Generally this will not need to be changed. If you have changed the port on the Syn-Apps Paging Relay hardware first make sure the control ports match for all paging relays in use. Change the **Control Port** and press Save to set a new control port.

Each paging relay you plan to use with the system must be registered in the **Syn-Apps IP Devices** area on the Settings>>IP Endpoint Setup: Syn-Apps IP tab. You may want to enter the following information for each of the paging relays you plan to use (press **Edit** to begin editing the row and **Update** to finish):

- **Name**: Enter a name for the paging relay (The MAC is filled in as the name by default).
- **Description**: Enter a description for the paging relay (The device type is filled in as the description by default).

Descriptions of the remaining table columns:

- **Model**: (Not Editable) The Syn-Apps IP devices model name.
- **IP Address**: (Not Editable) The IP Address of the Syn-Apps IP Device.
- **Firmware**: (Not Editable) The firmware version of the Syn-Apps IP Device.
- **Clock**: (Not Editable) True if the Syn-Apps IP Device has a clock attached.
- **Last Seen**: (Not Editable) The date and time of the last registration or heartbeat message from the Syn-Apps IP Device.
- **D.N.**: The directory number of the Syn-Apps IP device (NA for paging relays).

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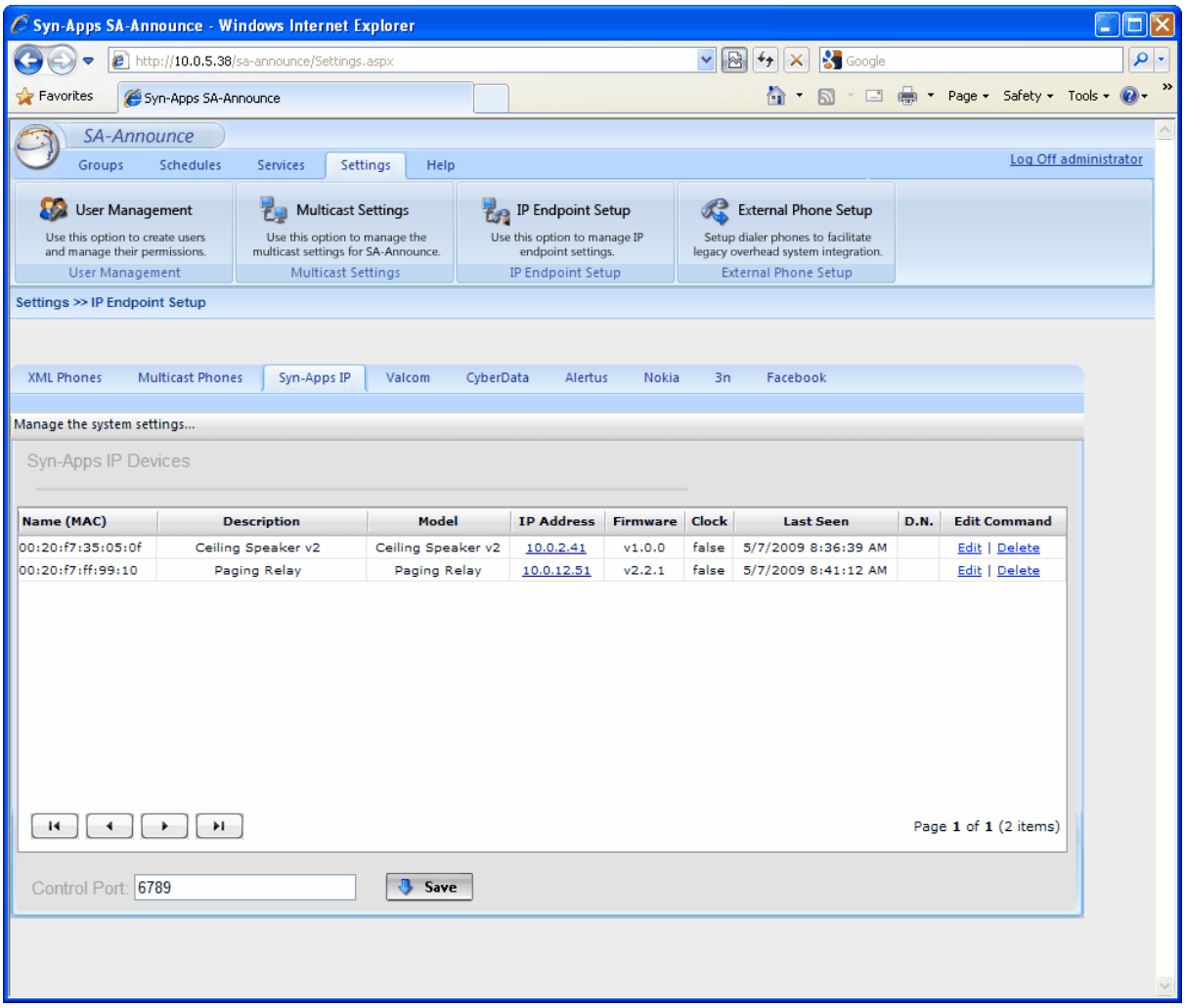

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18.1 Supported Paging Relays

SA-Announce supports all Syn-Apps Paging Relays with firmware version 2.2.1 or greater.

18.2 Paging Relay Setup

This section describes the configuration of the Syn-Apps Paging Relay.

Once you plug the Syn-Apps Paging Relay in it will use DHCP for network settings by default. The new Syn-Apps Paging Relays can be easily configured to auto register with SA-Announce so no further setup is required:

Set DHCP option 72 to the IP Address of your SA-Announce server:

IF you are using your routers to server DHCP you will want to add the option 72 command to the scope that is providing the speakers with IP address information:

```
ip dhcp pool Voice
  network 10.0.12.0 255.255.255.0
  default-router 10.0.12.1
  option 150 ip 10.0.0.21
  dns-server 10.0.0.2
  option 72 ip 10.0.5.38
  lease 8 23 59
```

For Windows Server you would perform the following:
http://www.cisco.com/en/US/products/sw/voicesw/ps556/products_tech_note09186a00800942f4.shtml

Note: As of SA-Announce release 7.0.60 older paging relays are no longer supported and will need a firmware update to version 2.2.1 or greater to function properly with SA-Announce.

Once the relay has registered with the SA-Announce server (see above, setting DHCP option 72) you can find its IP address by going to **Settings>>IP Endpoint Setup: Syn-Apps IP**. Click on the devices IP address in the table to be directed to the relays web page.

The default login credentials for the device are:
- User Name: admin
- Password: admin

After logging into the web page you will see the home page and the basic device settings. To change the network and other settings of the device use the **Admin Setup** button.

[Syn-Apps Paging Relay web interface: Admin Setup page]

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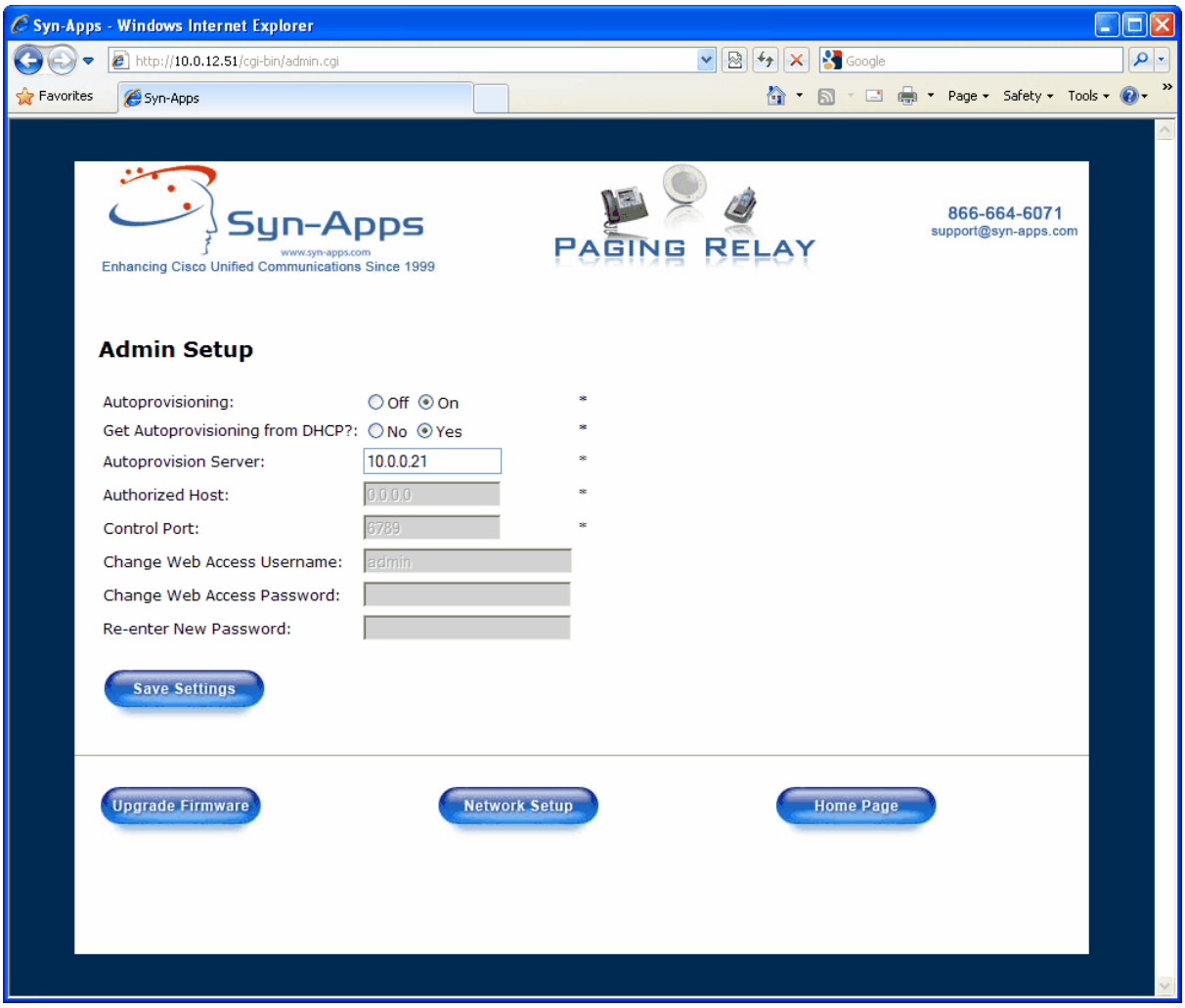

18.3 Paging Relay Traffic Flow

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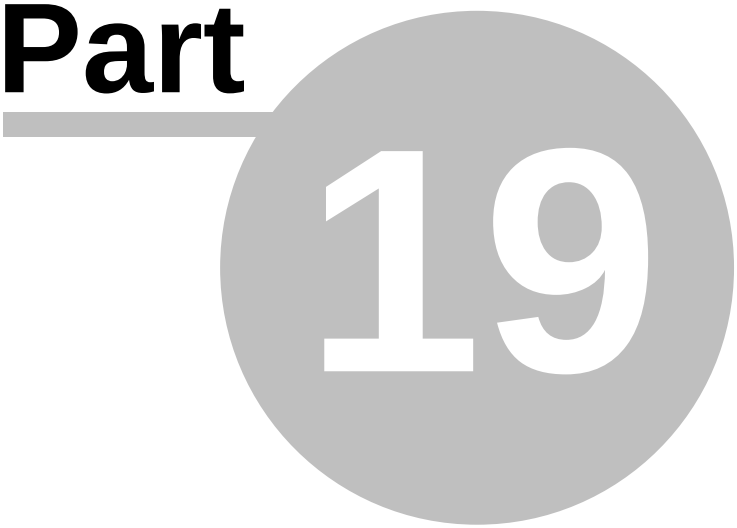
Syn-Apps IP Speaker Configuration



19 Syn-Apps IP Speaker Configuration

Settings>>IP Endpoint Setup: Syn-Apps IP

The **Settings>>IP Endpoint Setup: Syn-Apps IP** tab is used to view and configure the Syn-Apps IP Speaker parameters. For information on adding Syn-Apps IP Speakers to a SA-Announce notification group see the Syn-Apps IP Devices section.

The Control Port is set to 6789 by default. Generally this will not need to be changed. If you have changed the port on the Syn-Apps IP Speaker hardware first make sure the control ports match for all IP speakers in use. Change the **Control Port** and press Save to set a new control port.

Each Syn-Apps IP Speaker you plan to use with the system must be registered in the **Syn-Apps IP Devices** area on the Settings>>IP Endpoint Setup: Syn-Apps IP tab. You may want to enter the following information for each of the speakers you plan to use (press **Edit** to begin editing the row and **Update** to finish):

- **Name**: Enter a name for the paging relay (The MAC is filled in as the name by default).
- **Description**: Enter a description for the paging relay (The device type is filled in as the description by default).
- **Model**: (Not Editable) The Syn-Apps IP devices model name.
- **IP Address**: (Not Editable) The IP Address of the Syn-Apps IP Device.
- **Firmware**: (Not Editable) The firmware version of the Syn-Apps IP Device.
- **Clock**: (Not Editable) True if the Syn-Apps IP Device has a clock attached.
- **Last Seen**: (Not Editable) The date and time of the last registration or heartbeat message from the Syn-Apps IP Device.
- **D.N.**: Enter a directory number for the speaker if it is of the Talk-Back type, this will be used for holler (intercom) addressing.

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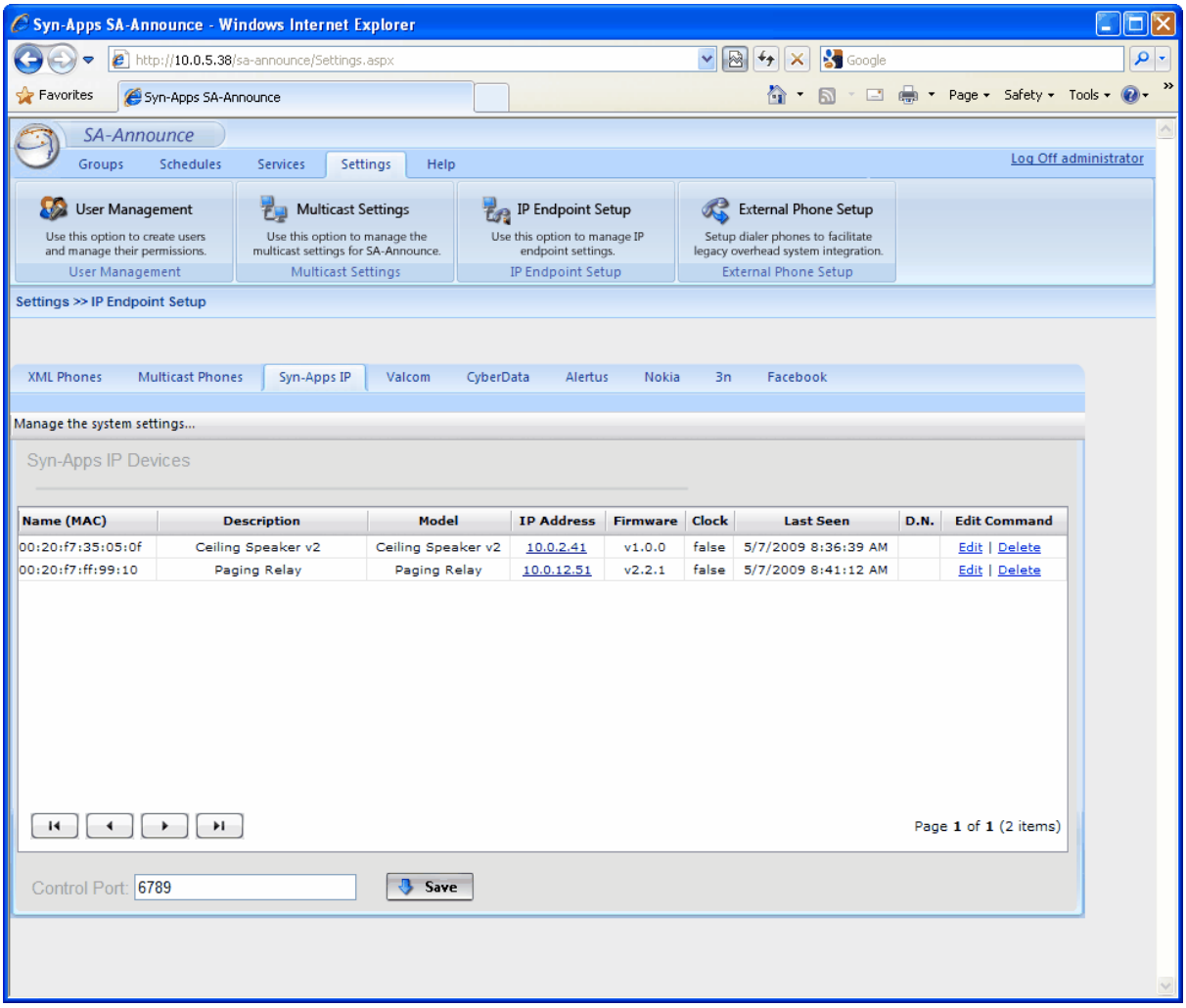

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19.1 Supported Syn-Apps IP Speakers

SA-Announce supports all Syn-Apps IP Speakers with firmware version 1.0.0 or greater.

19.2 Syn-Apps IP Speaker Setup

This section describes the configuration of Syn-Apps IP Speakers.

Once you plug the Syn-Apps IP Speaker in it will use DHCP for network settings by default. The new Syn-Apps Paging Relays can be easily configured to auto register with SA-Announce so no further setup is required:

Set DHCP option 72 to the IP Address of your SA-Announce server:

IF you are using your routers to server DHCP you will want to add the option 72 command to the scope that is providing the speakers with IP address information:

```
ip dhcp pool Voice
  network 10.0.12.0 255.255.255.0
  default-router 10.0.12.1
  option 150 ip 10.0.0.21
  dns-server 10.0.0.2
  option 72 ip 10.0.5.38
  lease 8 23 59
```

For Windows Server you would perform the following:
http://www.cisco.com/en/US/products/sw/voicesw/ps556/products_tech_note09186a00800942f4.shtml

Once the speaker has registered with the SA-Announce server (see above, setting DHCP option 72) you can find its IP address by going to **Settings>>IP Endpoint Setup: Syn-Apps IP**. Click on the devices IP address in the table to be directed to the relays web page.

The default login credentials for the device are:
- User Name: admin
- Password: admin

After logging into the web page you will see the home page and the default device settings. To change the basic device settings use the **Device Config** button, to change the network and other settings of the device use the **Networking** button.

[Syn-Apps IP Speaker web interface: Home page]

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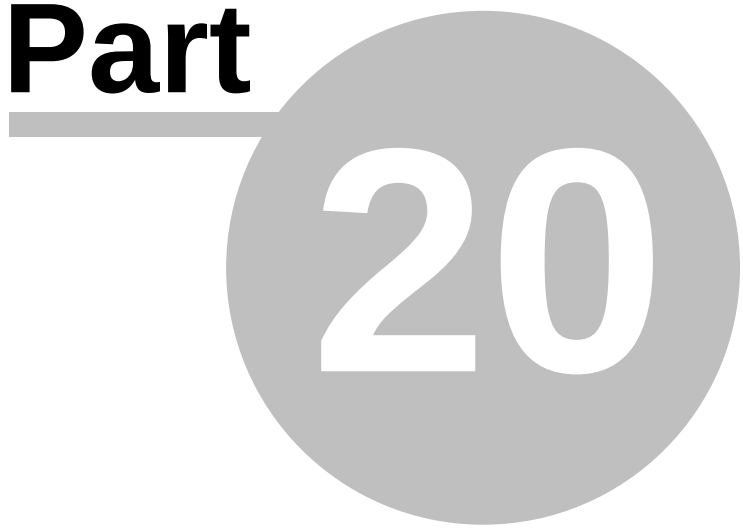
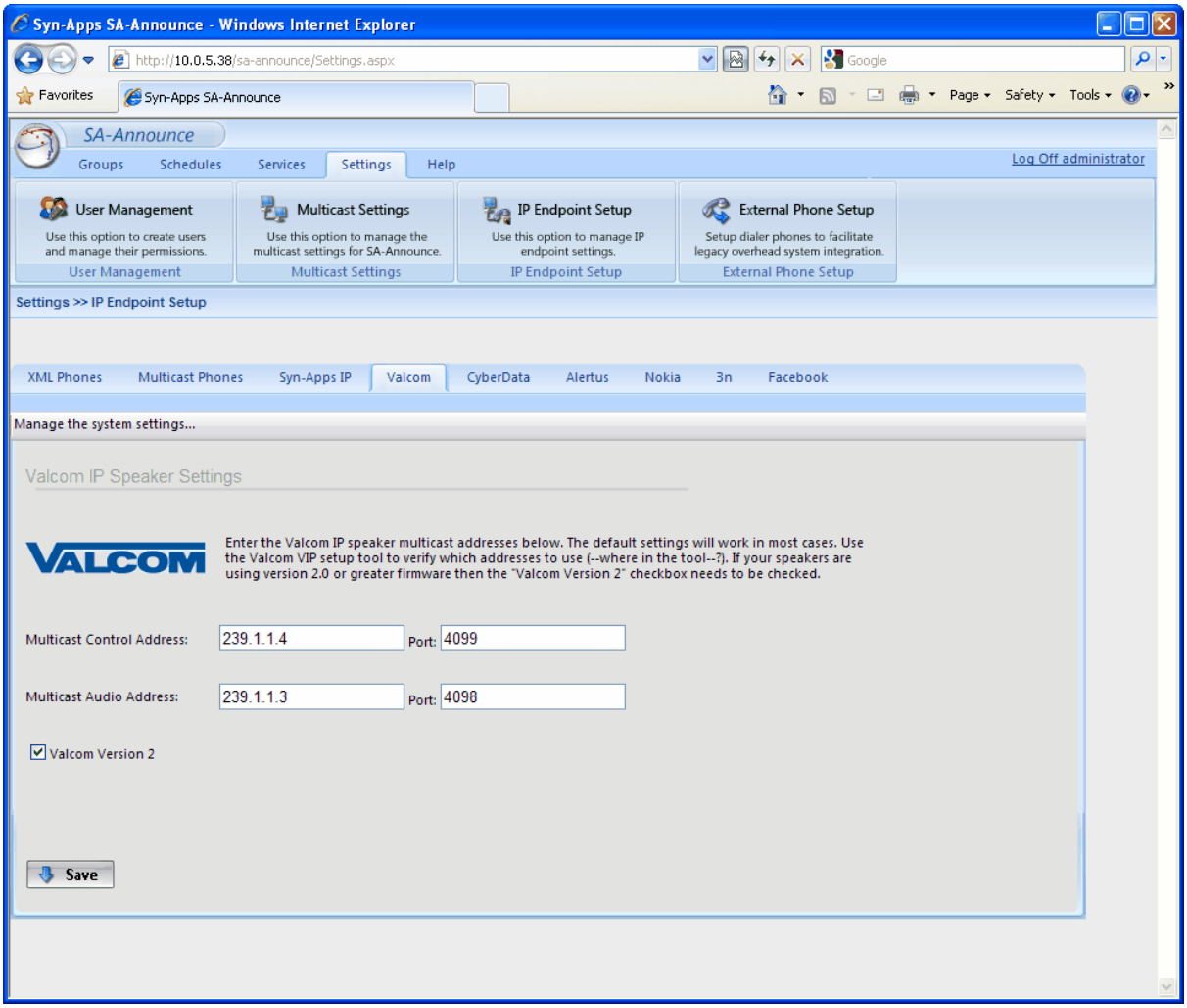
Valcom IP Speaker Configuration



20 Valcom IP Speaker Configuration

Settings>>IP Endpoint Setup: Valcom:

The Valcom IP Speaker settings are located at **Settings>>IP Endpoint Setup: Valcom**. In most cases the settings will not need to be changed (assuming you are using Valcom version 2.x firmware, recommended). If you are using Valcom version 1.x firmware or have non default multicast control and audio addresses configured on your Valcom speakers you will need to match these settings to your speaker settings. The Valcom speaker settings are shown in the Valcom VIP-102B IP Solutions tool under the **System>>Network Settings** option.



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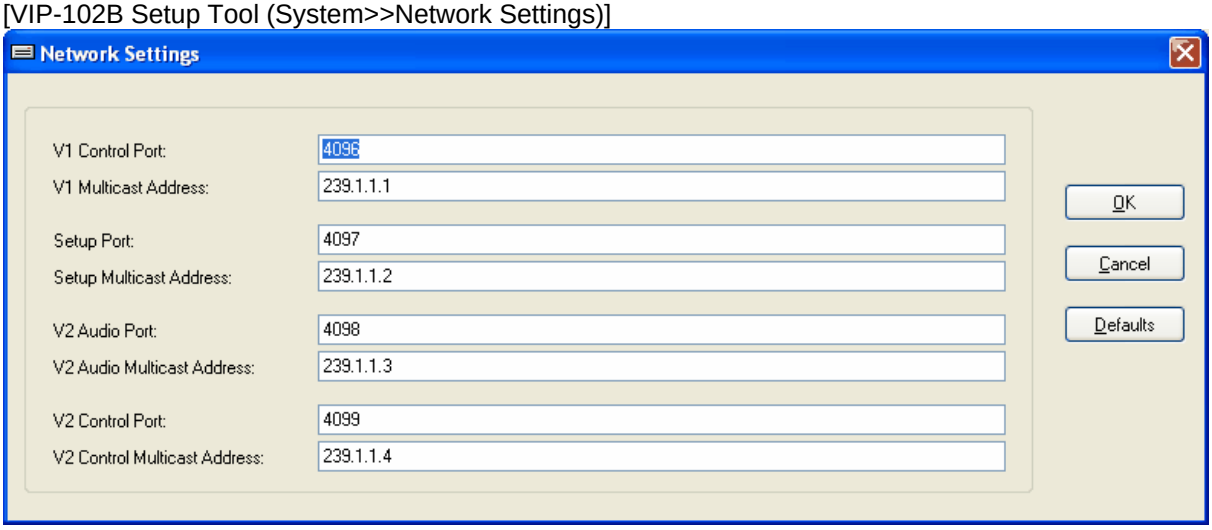
[VIP-102B Setup Tool (System>>Network Settings)]



20.1 Supported Valcom Speakers

SA-Announce supports the entire Valcom IP Speaker platform. These speakers include:

- Valcom VIP 130-L (one-way outdoor horn)
- Valcom VIP 402 (lay-in ceiling speaker)
- Valcom VIP 140 (wall speaker)
- Valcom VIP 411 DS (wall mount w/ digital clock)
- Valcom VIP 412 DF (wall surface mount w/ digital clock)
- Valcom VIP 430 (wall mount talk-back)
- Valcom VIP 821 (enhanced network trunk port)
- Valcom VIP 822 (duel enhanced network trunk port)
- Valcom VIP 824 (quad enhanced network trunk port)

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20.2 Valcom IP Speaker Setup

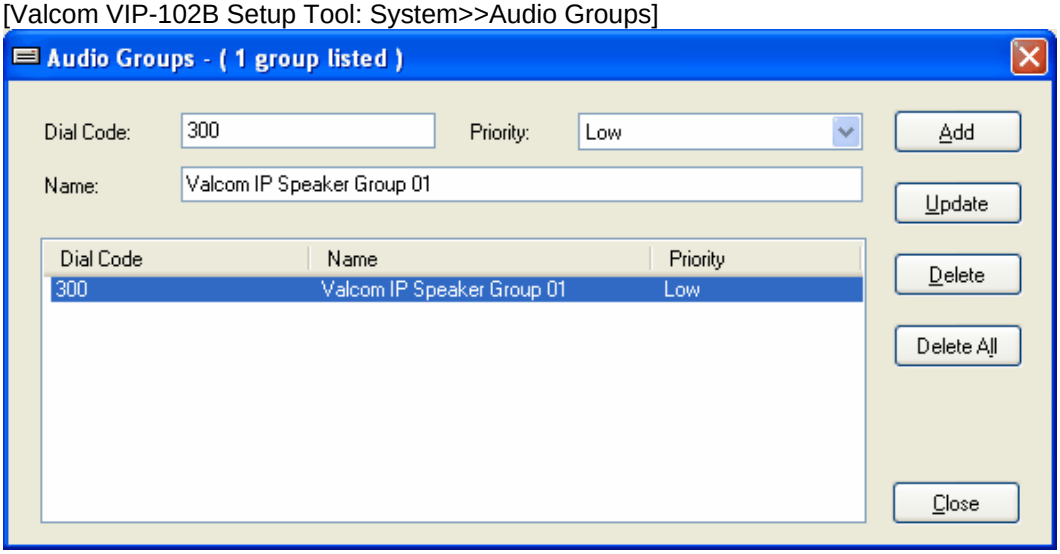
This section describes how to setup your Valcom IP Speakers into groups for use with SA-Announce. For information on how to add these Valcom groups to a SA-Announce notification group please see the section IP Speaker Integration.

See the section Valcom IP Speaker Configuration for details on setting up the Valcom audio and control address/port.

To add Valcom IP speakers to groups for use with SA-Announce first open the VIP-102B IP Solutions Setup Tool from Valcom and scan for your speakers.
Select **System>>Audio Groups** from the main menu bar.
A new window will appear, add a **Dial Code** (the unique group number) select a **Priority** and finally give the group a **Name**. Press the **Add** button to add the group to the Valcom system.
Next select **System>>Audio Group Membership** from the main menu bar.
Select a speaker group form the **Audio Group** drop down menu and then add speakers to the group by marking the **Device** checkbox.

The group can now be used in SA-Announce notification groups and schedules (by adding the Dial Code to the Valcom input area of the IP Speakers tab of a group, see IP Speaker Integration)

[Valcom VIP-102B Setup Tool: System>>Audio Groups]



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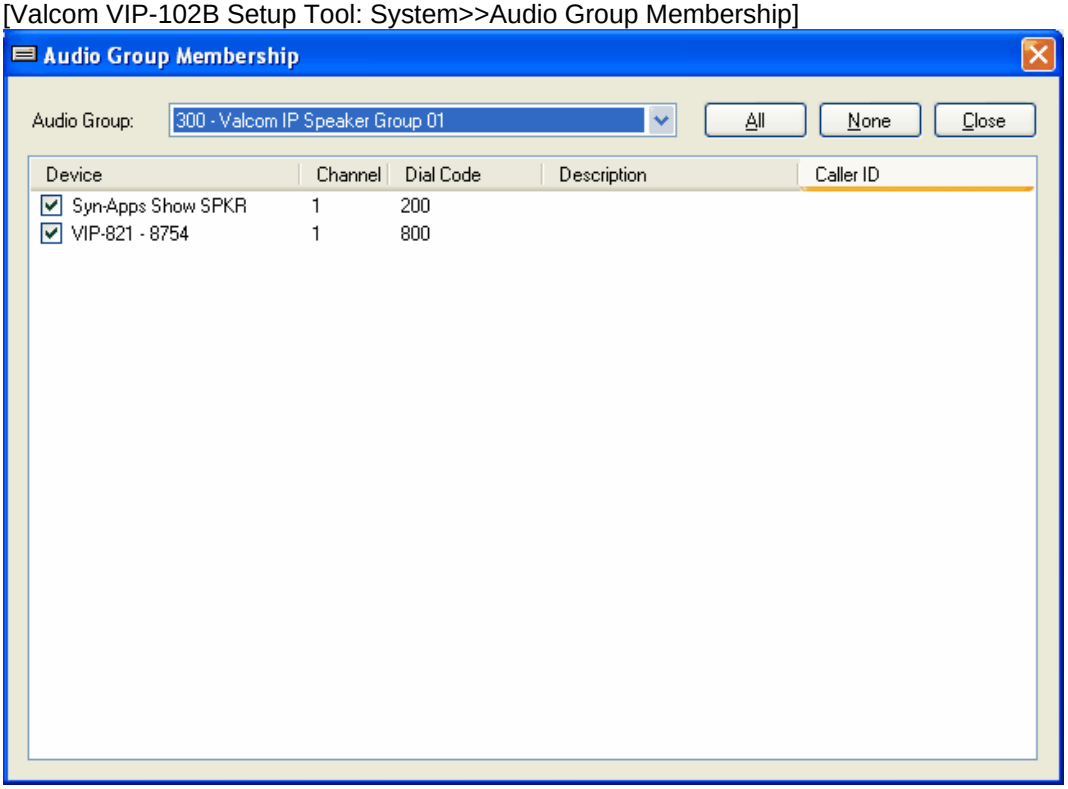
[Valcom VIP-102B Setup Tool: System>>Audio Group Membership]



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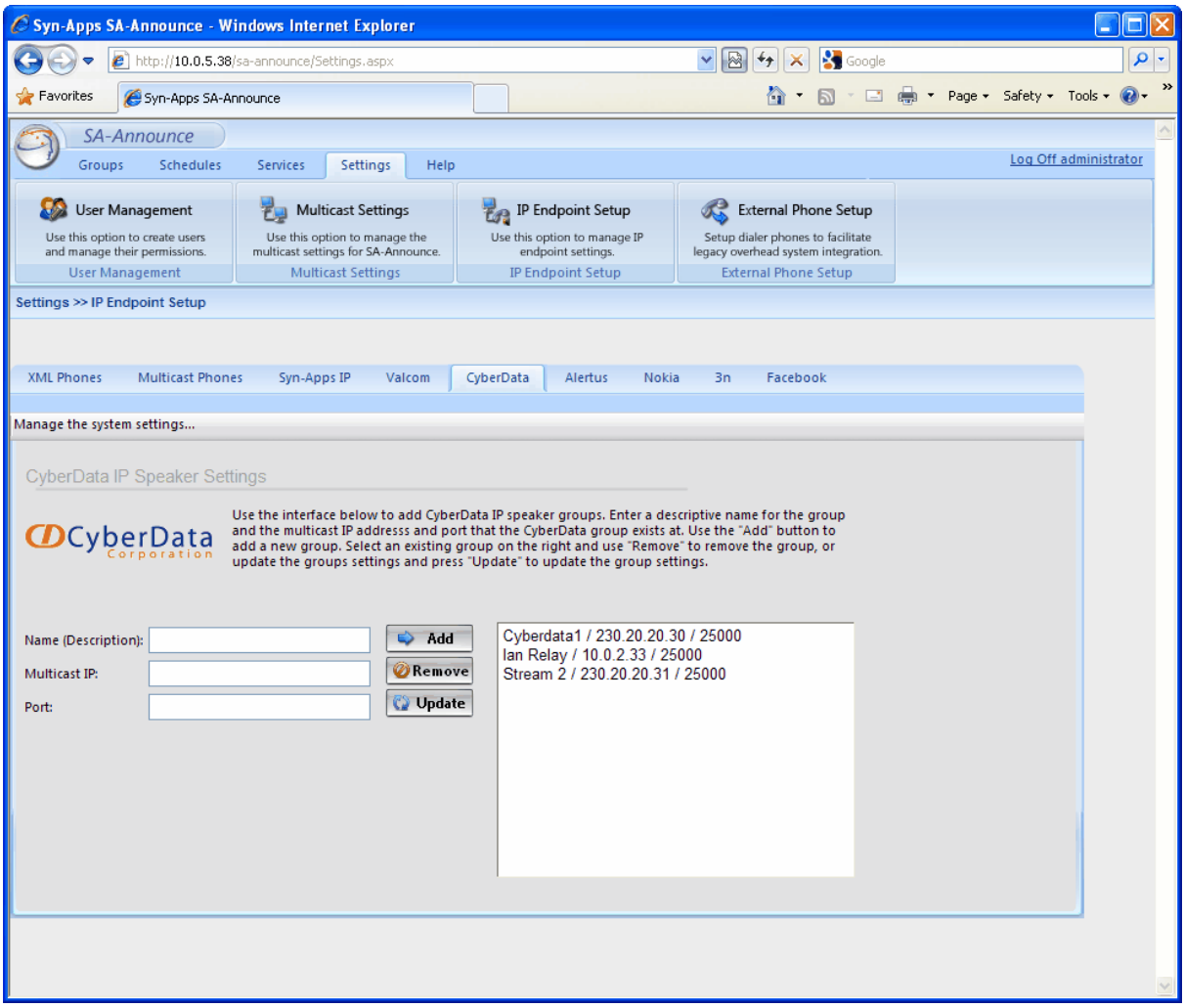
CyberData IP Speaker Configuration

Part 21

21 CyberData IP Speaker Configuration

Settings>>IP Endpoint Setup: CyberData

The **Settings>>IP Endpoint Setup: CyberData** page is used to configure SA-Announce with the required CyberData speaker group parameters. The CyberData speaker groups are setup using the CyberData speakers' web page (use the CyberData discovery tool to discover the CyberData speakers on your network and web to their IP address). The speakers must be setup with multicast groups in order to function properly with SA-Announce, see the CyberData Speaker Setup section for details. Multicast is required from the SA-Announce application server to the CyberData speakers.


Syn-Apps SA-Announce - Windows Internet Explorer
http://10.0.5.38/sa-announce/Settings.aspx
Favorites
Syn-Apps SA-Announce
SA-Announce
Groups
Schedules
Services
Settings
Help
Log Off administrator
User Management
Use this option to create users and manage their permissions.
Multicast Settings
Use this option to manage the multicast settings for SA-Announce.
IP Endpoint Setup
Use this option to manage IP endpoint settings.
External Phone Setup
Setup dialer phones to facilitate legacy overhead system integration.
Settings >> IP Endpoint Setup
XML Phones
Multicast Phones
Syn-Apps IP
Valcom
CyberData
Alertus
Nokia
3n
Facebook
Manage the system settings...
CyberData IP Speaker Settings
CyberData Corporation
Use the interface below to add CyberData IP speaker groups. Enter a descriptive name for the group and the multicast IP addresss and port that the CyberData group exists at. Use the "Add" button to add a new group. Select an existing group on the right and use "Remove" to remove the group, or update the groups settings and press "Update" to update the group settings.
Name (Description):
Multicast IP:
Port:
Add
Remove
Update
Cyberdata1 / 230.20.20.30 / 25000
Ian Relay / 10.0.2.33 / 25000
Stream 2 / 230.20.20.31 / 25000

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21.1 Supported CyberData Speakers

SA-Announce supports the entire IP Speaker platform from CyberData. These speakers include:

- VoIP Ceiling Speaker
- VoIP Paging Gateway
- VoIP Multicast Gateway
- VoIP Loudspeaker Amplifier, PoE
- VoIP Loudspeaker Amplifier, AC
- VoIP Loudspeaker Amplifier Wireless
- VoIP Paging Amplifier
- VoIP Intercom
- VoIP Paging Server
- VoIP 4-Port Zone Controller
- VoIP Talk-back Speaker

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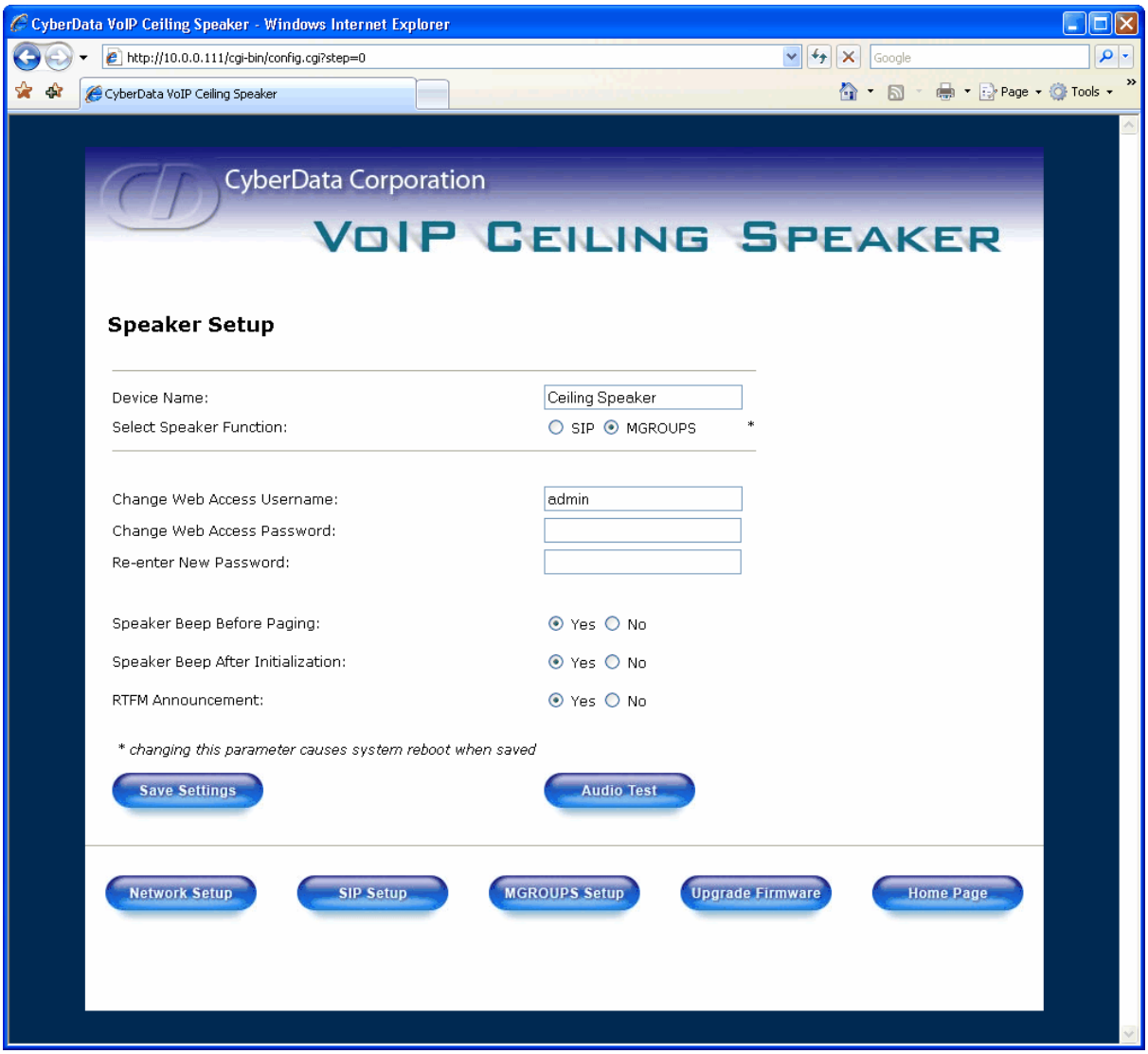
21.2 CyberData Speaker Setup

This section describes how to setup your CyberData Speakers into multicast groups for use with SA-Announce. See the section CyberData IP Speaker Configuration for details on adding these groups to the SA-Announce Interface.

First make sure the speakers are in **MGROUPS** mode. Browse to the web page of the speaker (default login: admin, admin) and select the **Speaker Setup** link button. On the Speaker Setup page set the speaker function to **MGROUPS** and press the **Save Settings** button.

Next browse to the MGROUPS Setup page by pressing the **MGROUPS Setup** button. Add groups to the speaker by adding a multicast address and port, priority and name for the group. Add the same group to all other speakers that are to be part of the group.



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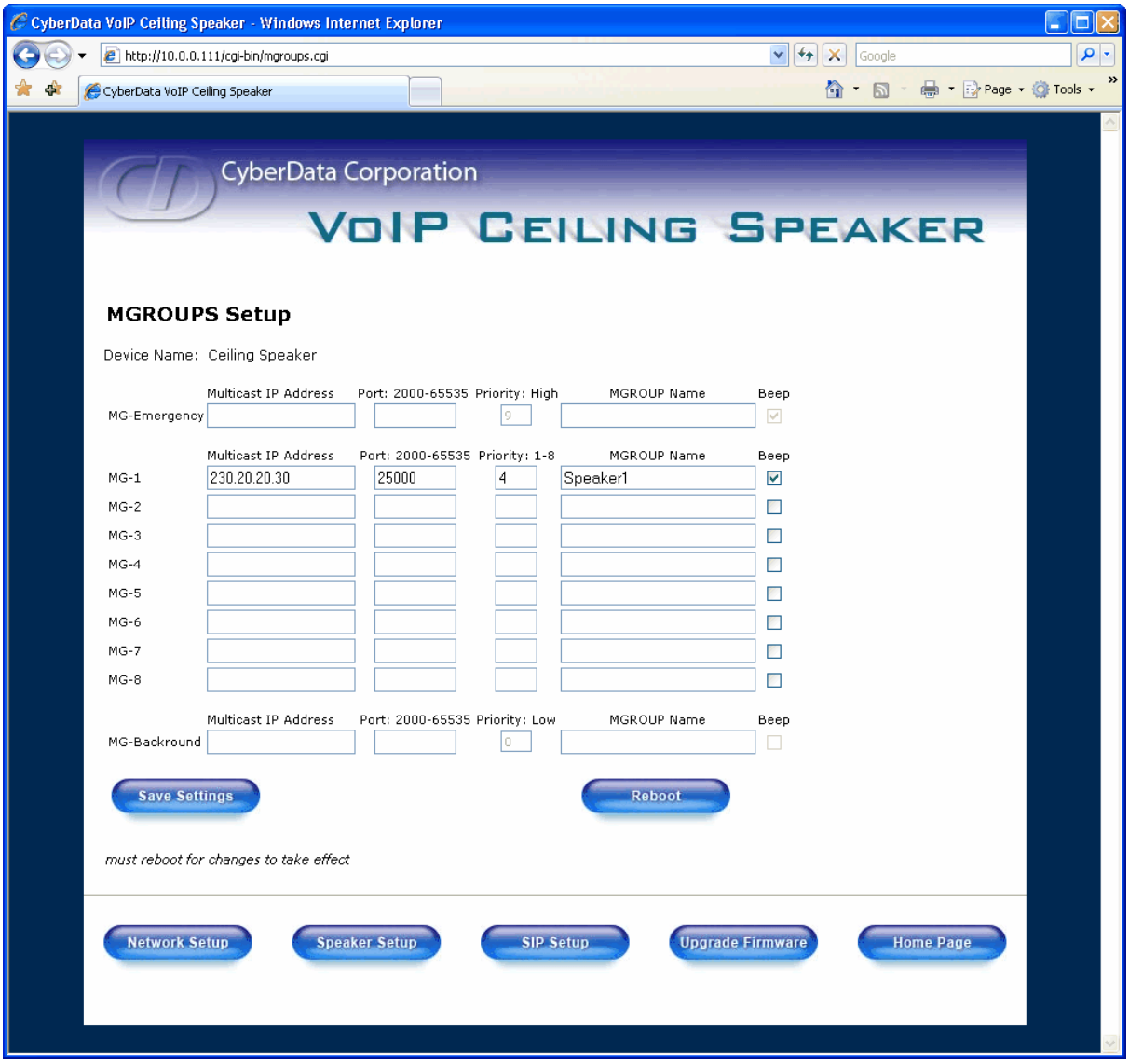

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Alertus Configuration

Part 22

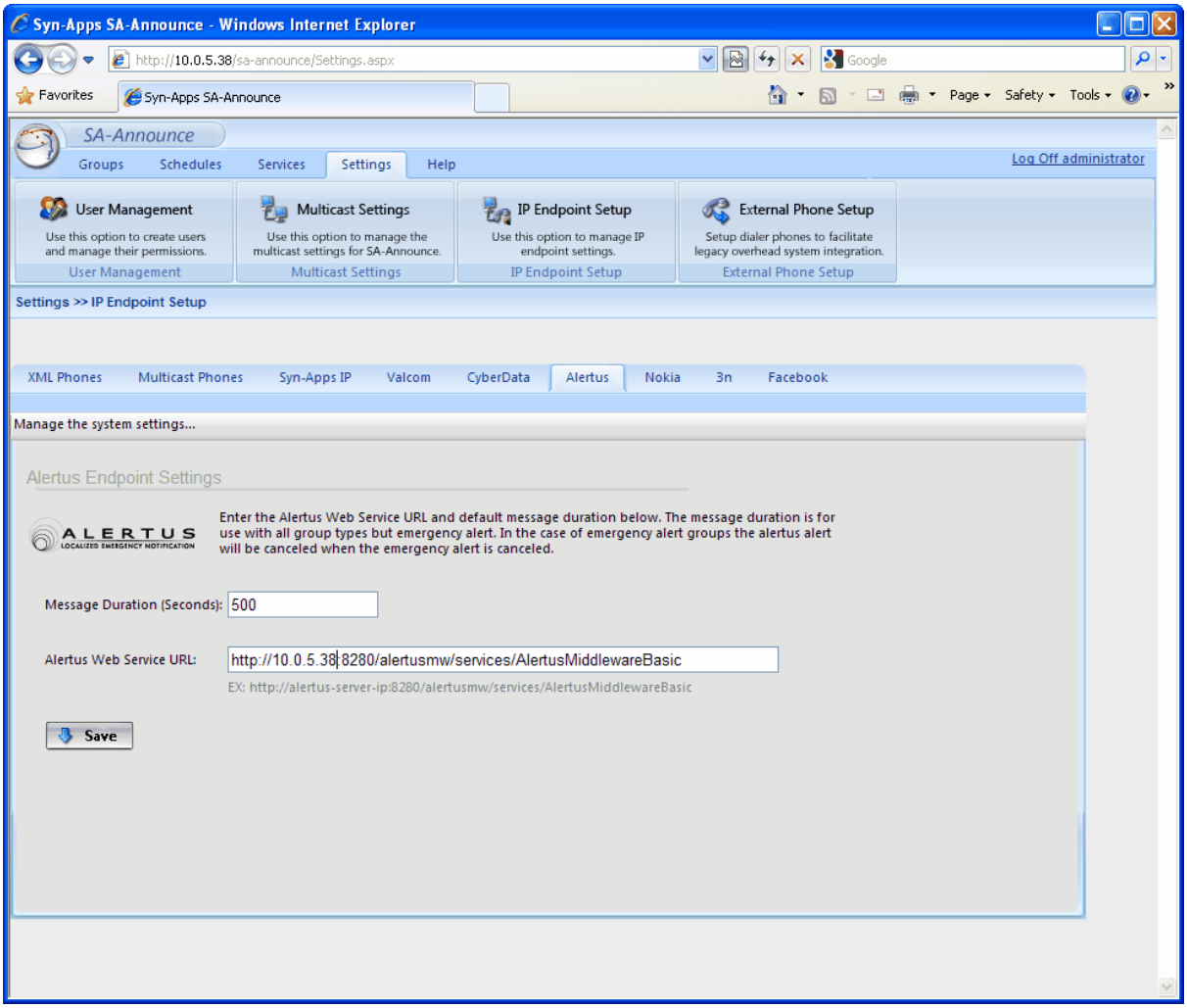
22 Alertus Configuration

Settings>>IP Endpoint Setup: Alertus

The **Settings>>IP Endpoint Setup: Alertus** tab is used to configure SA-Announce with the required Alertus parameters. For information on adding Alertus Beacon Groups to a SA-Announce notification group see the Alertus section.

To setup the Alertus integration the **Alertus Web Service URL** must be configured. Type the URL into the **Alertus Web Service URL** text box and press the **Save** button to save the changes. The URL will be verified and if it appears valid the Alertus settings will be extracted for use in SA-Announce.

The **Message Duration (Seconds)** entry box controls the default Alertus alert duration. For groups like Emergency Alert and schedules this setting is not used (the alert will be activated with the Emergency Alert / Schedule and it will be deactivated with the Emergency Alert / Schedule). For groups like Normal and Text the message duration setting will be used, the Alertus beacons will carry the message for the specified amount of time.



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22.1 Supported Alertus Devices

SA-Announce supports all Alertus Beacons.

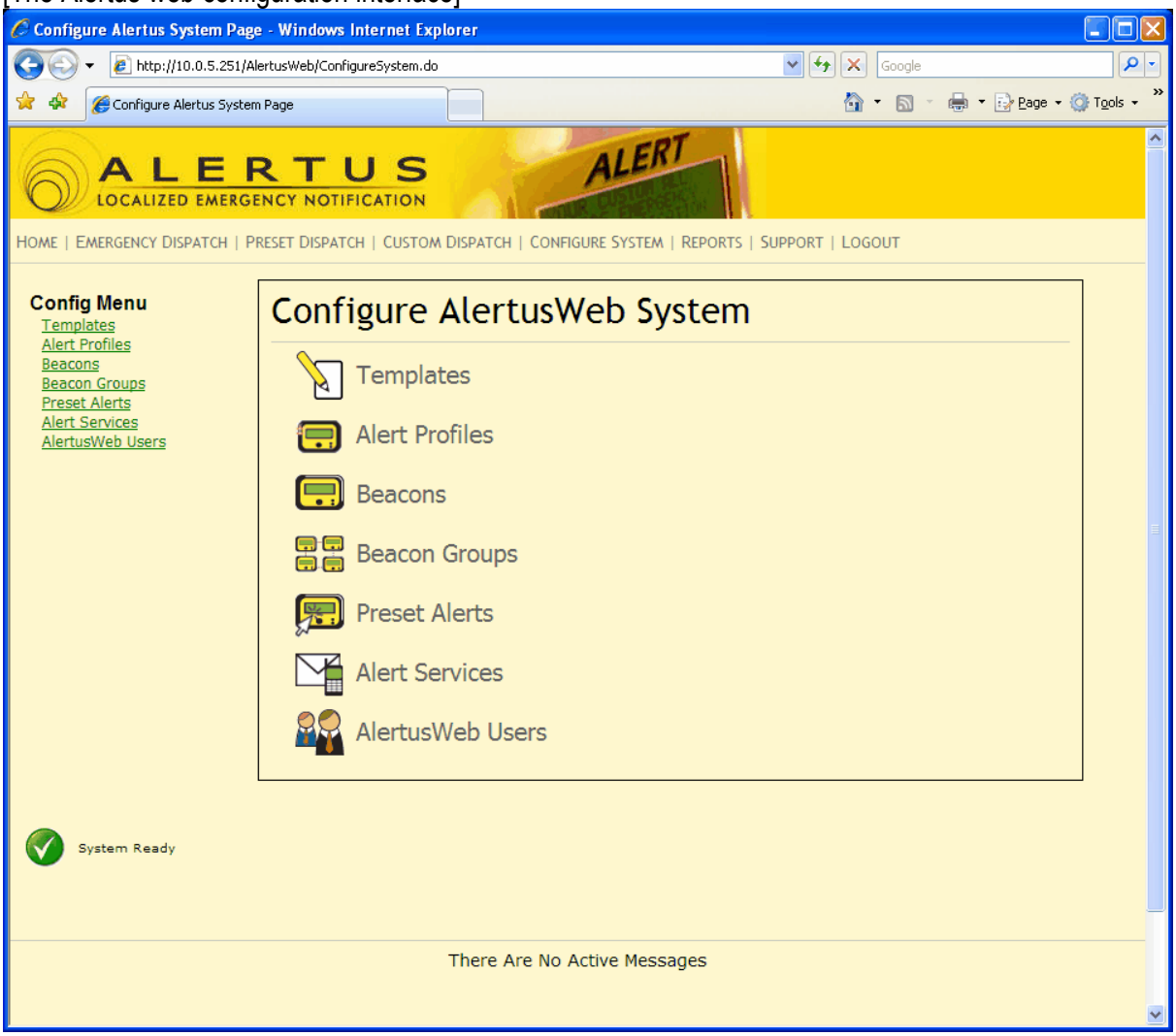
22.2 Alertus Device Setup

This section describes how SA-Announce integrates with the Alertus System.

SA-Announce can automatically activate Alertus **Beacon Groups** that you have defined in the Alertus web configuration pages. Alertus **Alert Profiles** are also used by SA-Announce, the Alert Profile defines the way the Alert Beacons behave during an event (how the lights flash, which sound is played etc).

For proper operation SA-Announce requires that the Alertus system have at least one alert profile and one beacon group.

[The Alertus web configuration interface]



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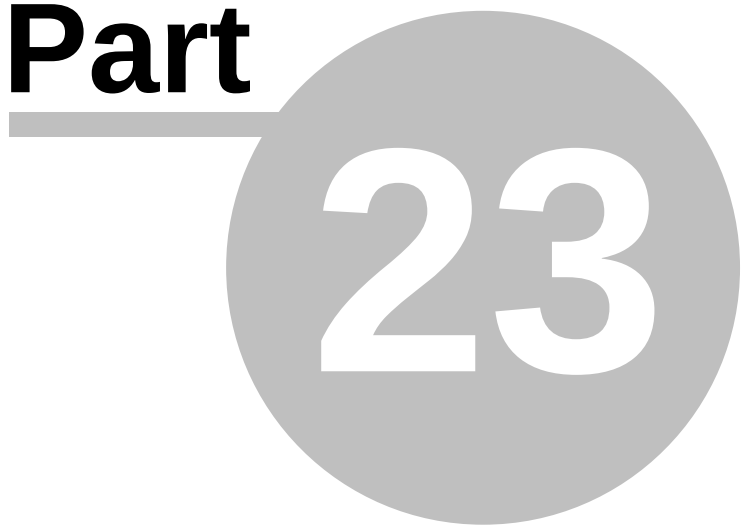
Everbridge Configuration



23 Everbridge Configuration

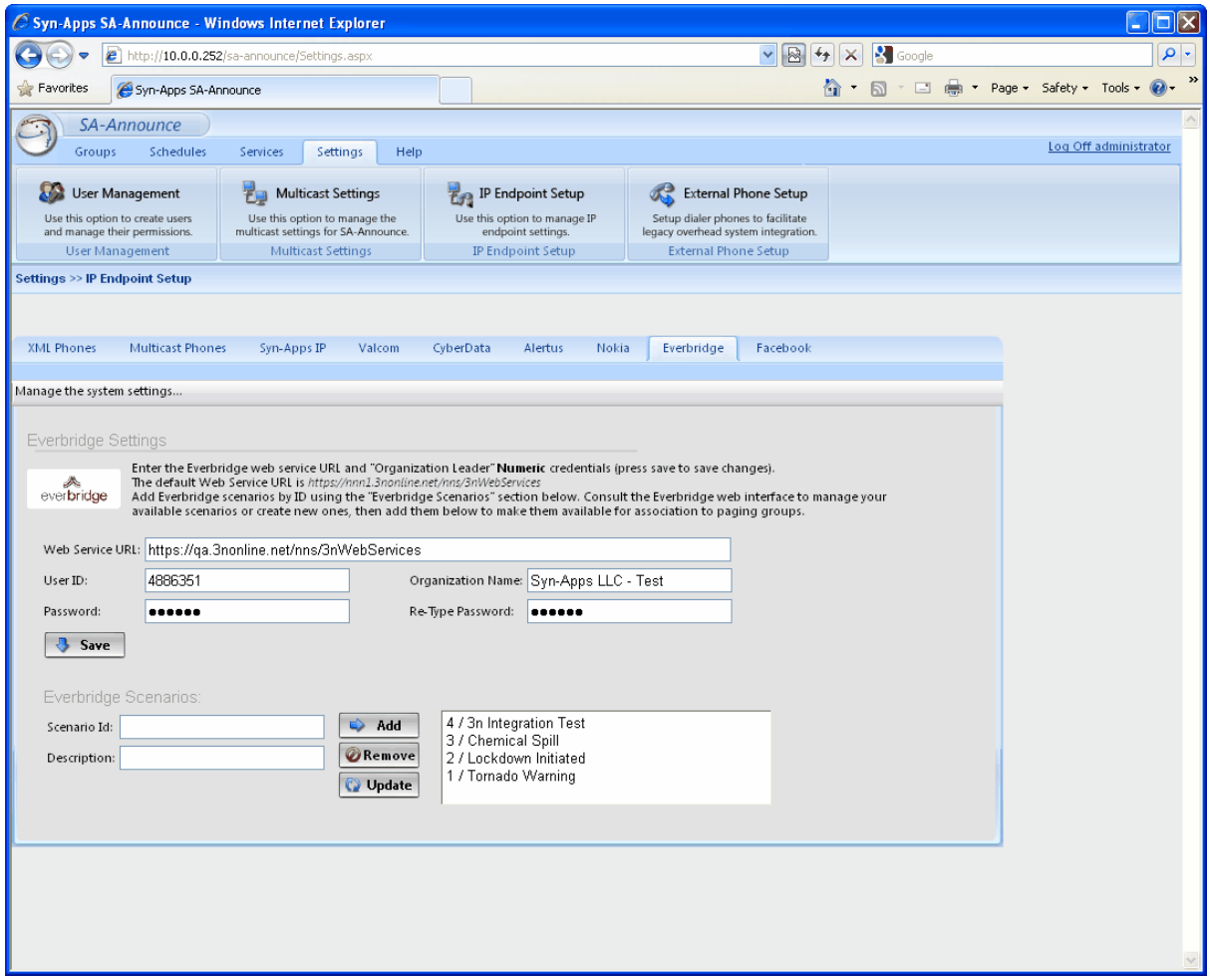
Settings>>IP Endpoint Setup: Everbridge

The **Settings>>IP Endpoint Setup: Everbridge** tab is used to configure SA-Announce with the required 3n parameters. For information on adding 3n Scenarios to a SA-Announce notification group see the Everbridge section. Provide the following Everbridge web service information in the provided interface:

- **Everbridge Web Service URL**: Enter the Everbridge web service url in the provided entry box. The default URL is *https://www.3nonline.net/nns/3nWebServices*.
- **User ID**: Enter your Numeric Everbridge User ID.
- **Organization Name**: Enter your Everbridge organization name.
- **Password**: Enter your numeric Everbridge password.

Press the **Save** button to save the changes to the Everbridge web service settings. After pressing save the URL will be contacted so connectivity can be checked, if problems are encountered an error message will appear. The most likely cause of error would be that the server has no connectivity to internet.

After setting up the web service parameters you will need to enter your Everbridge Scenarios by **Scenario Id** and **Name** and press the **Add** button. The Scenario ID must be the same as found on the Everbridge Scenarios page. See the Everbridge Setup section for details on finding existing scenario Id's and creating new scenarios.



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23.1 3n Setup

This section describes how SA-Announce integrates with the 3n System.

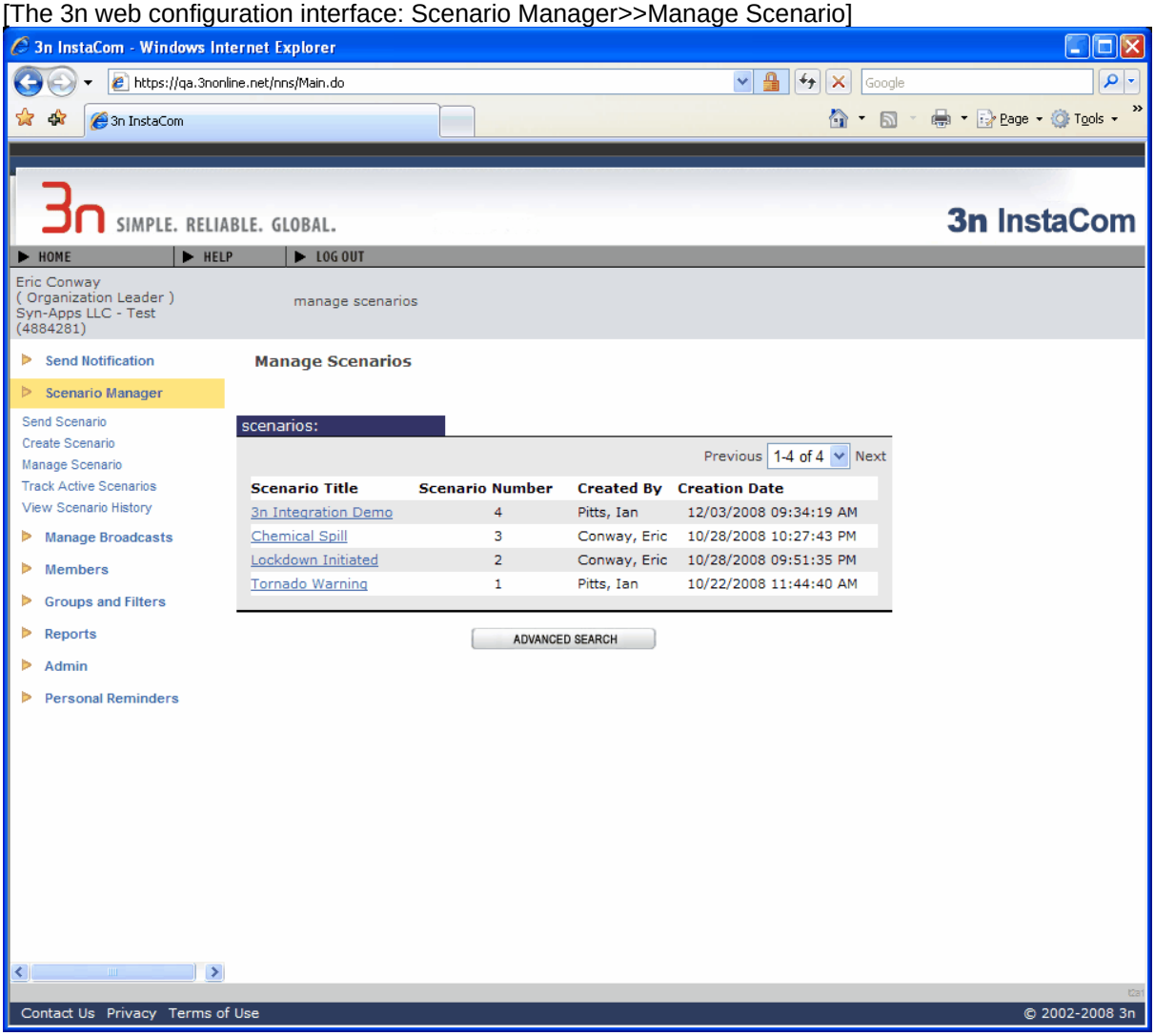
SA-Announce can automatically activate 3n **Scenarios** that you have defined in the 3n web configuration pages when a SA-Announce group is activated.

For proper integration SA-Announce requires that the 3n system have at least one scenario defined.

To view currently created 3n Scenarios browse to the 3n management interface **Scenario Manager>>Manage Scenario** the scenario title and number are listed (enter the scenario title/number of scenarios you would like to use in SA-Announce by browsing to SA-Announce: **Settings>>IP Endpoint Setup: 3n** tab. This process is described in the 3n Configuration section.

To create new scenarios in the 3n system you must first create an unscheduled notification (Send Notification) and then use the **Scenario Manager>>Create Scenario** to create a scenario using that unscheduled notification.

[The 3n web configuration interface: Scenario Manager>>Manage Scenario]



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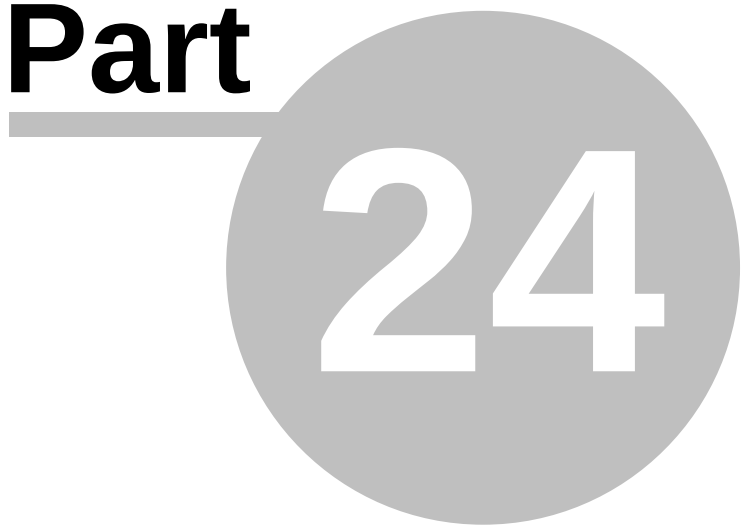
Facebook Configuration



24 Facebook Configuration

Settings>>IP Endpoint Setup: Facebook

The **Settings>>IP Endpoint Setup: Facebook** tab is used to integrate SA-Announce with your Facebook account.

The setup process must be preformed on the application server. The application server must have access to www.facebook.com at all times to provide this service.

From the application server open the SA-Announce administration interface and browse to **Settings>>IP Endpoint Setup: Facebook.** Push the Setup Facebook button to perform the setup procedure. You will be directed to Facebook.com, sign in using your account credentials and click allow on any requests for authorization.

After the setup completes for the first time you are ready to update your Facebook status automatically by pressing the button again as instructed by the message shown below the button. This will add a new status post to your Facebook wall which will instruct your friends to visit a link to allow the application access to send notifications. Only friends who visit the link and allow access will be able to receive the notification from SA-Announce. We recommend that you notify your friends (IE students on a campus) by other means as well to visit the link added to your profile wall to make sure they have allowed access, otherwise they will not receive notifications.

Once the setup is complete you will be able to use the "Notify Facebook Friends" checkbox on the Create Edit Groups page (for text and emergency alert group types only). Checking the checkbox for a particular text or emergency alert group will integrate that group with your Facebook account. Friends who have allowed the application access will receive a Facebook notification whenever the group is activated. The notification will consist of the text or emergency alert group message text.

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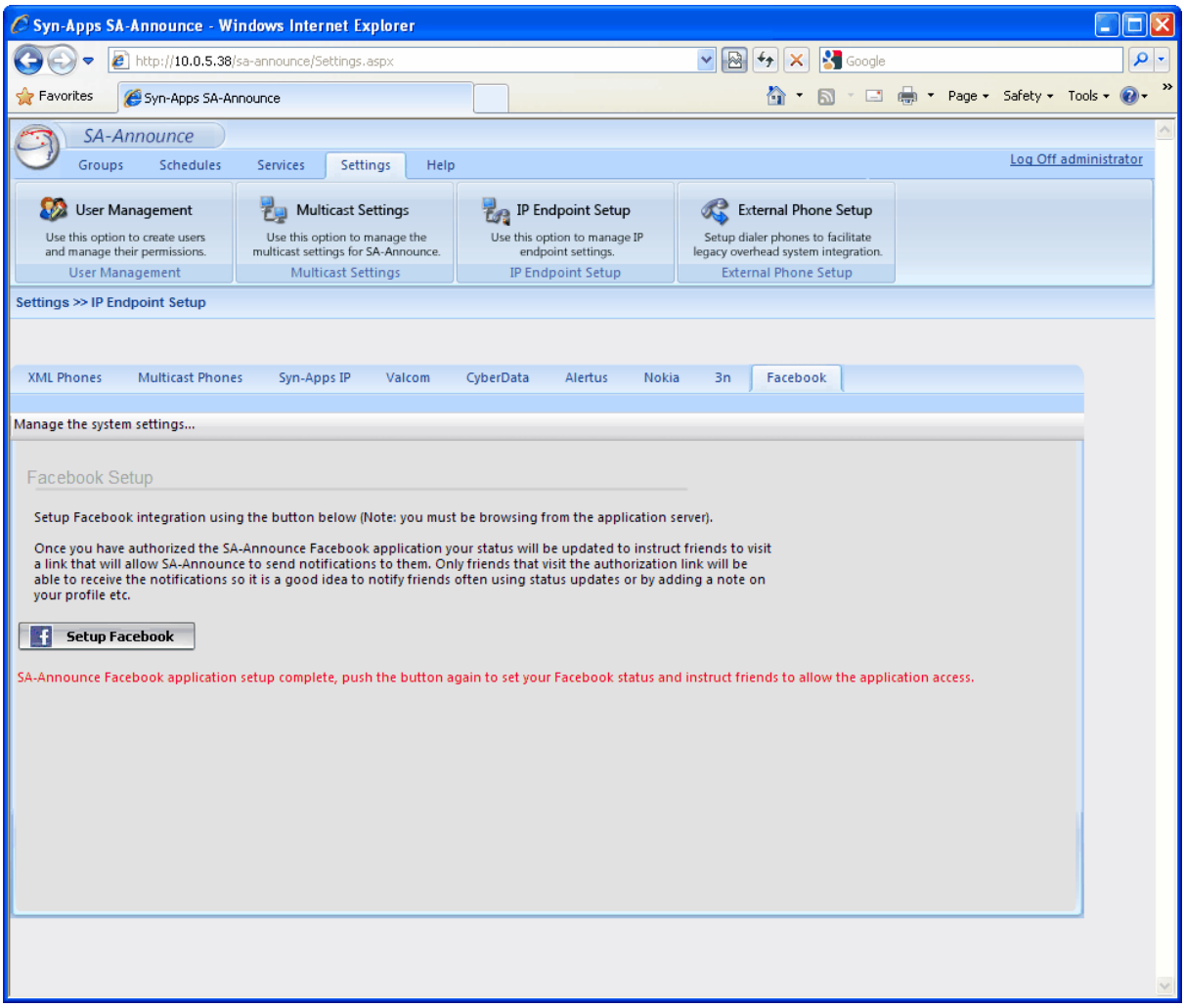
Syn-Apps SA-Announce - Windows Internet Explorer
http://10.0.5.38/sa-announce/Settings.aspx
Favorites
Syn-Apps SA-Announce
Page
Safety
Tools
SA-Announce
Groups
Schedules
Services
Settings
Help
Log Off administrator
User Management
Use this option to create users and manage their permissions.
User Management
Multicast Settings
Use this option to manage the multicast settings for SA-Announce.
Multicast Settings
IP Endpoint Setup
Use this option to manage IP endpoint settings.
IP Endpoint Setup
External Phone Setup
Setup dialer phones to facilitate legacy overhead system integration.
External Phone Setup
Settings >> IP Endpoint Setup
XML Phones
Multicast Phones
Syn-Apps IP
Valcom
CyberData
Alertus
Nokia
3n
Facebook
Manage the system settings...
Facebook Setup
Setup Facebook integration using the button below (Note: you must be browsing from the application server).
Once you have authorized the SA-Announce Facebook application your status will be updated to instruct friends to visit a link that will allow SA-Announce to send notifications to them. Only friends that visit the authorization link will be able to receive the notifications so it is a good idea to notify friends often using status updates or by adding a note on your profile etc.
Setup Facebook
SA-Announce Facebook application setup complete, push the button again to set your Facebook status and instruct friends to allow the application access.

24.1 Connection Diagram

Enter topic text here.

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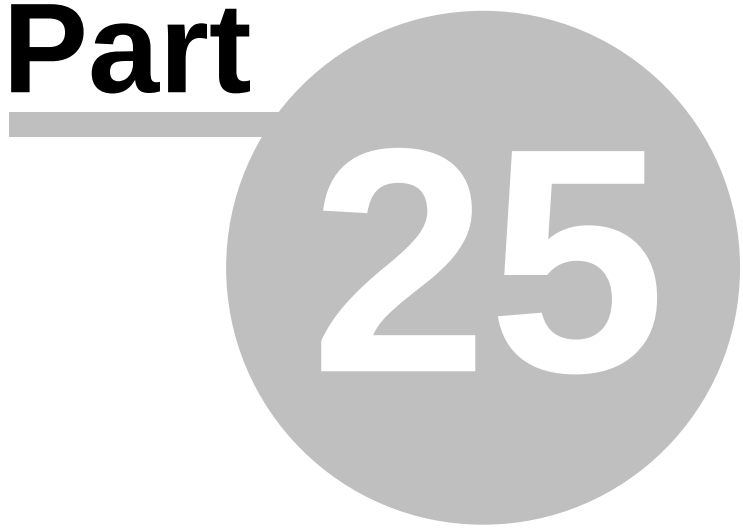
Twitter Configuration

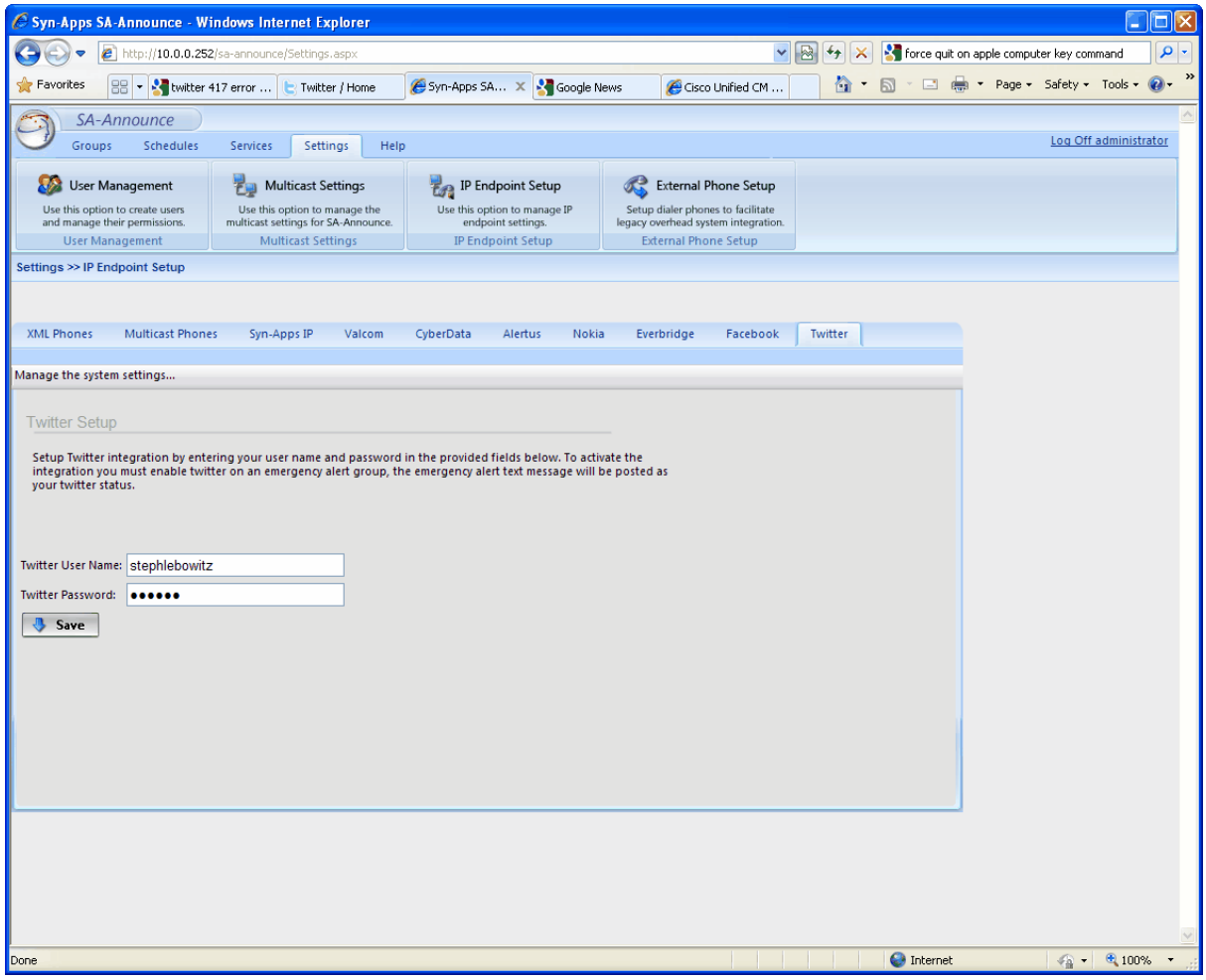


25 Twitter Configuration

Settings>>IP Endpoint Setup: Twitter

The **Settings>>IP Endpoint Setup: Twitter** tab is used to integrate SA-Announce with your Twitter account.

Simply enter your Twitter user name and password in the provided fields and press the **Save** button to save any changes. After saving the credentials you are ready to integrate Twitter with an emergency alert group.



25.1 Connection Diagram (COPY)

Enter topic text here.

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Analog Paging System Integration

Part 26

26 Analog Paging System Integration

Settings>>External Phone Setup

This section describes how to setup the dialers that facilitate the analog paging system integration. The dialers are virtual phones that will be added to your Cisco Unified Communications Manager, when needed SA-Announce will virtually take them off-hook and dial the overhead system in question. Communications Manager expertise is required to properly configure the section (IE Device Pool / Region, CSS, and Partition should be well understood parameters of the Communications Manager in question).

For information on adding analog systems to a paging group see the External Phones section.

The **Settings>>External Phone Setup** page allow automatic creation of the dialers used in the analog paging system integration. It is recommended you add a dialer for each simultaneous overhead system activation that can occur plus two for busy detection purposes (IE if four sites each have one overhead system [4 + 2] add 6 dialers).

All dialers should have the same Device Pool and CSS (Calling Search Space) since the dialers act as a pool and any one may be used for a specific notification group. In other words all dialers must be able to dial any and all of the overhead systems that are to be integrated with the SA-Announce system.

The following parameters are requested in the add phone interface:

- **Line Number**: Enter a unique line number for the virtual dialer phone.
- **Partition**: Select a partition for the line to reside in (this setting does not affect the dialer functionality, lines simply require partitions to make them unique and to add control mechanisms).
- **CSS**: Select a Calling Search Space for the line to reside in, the calling search space must contain the partition of the destination numbers you wish to dial.
- **Device Pool**: Select a Device Pool that will insure a G.711 codec lookup when the dialer dials the destination numbers you wish to dial (See CUCM Region).

Once the parameters are filled out press the **Add Phone** button to add the virtual phone to Communications Manager. Repeat to add all of the necessary dialers.

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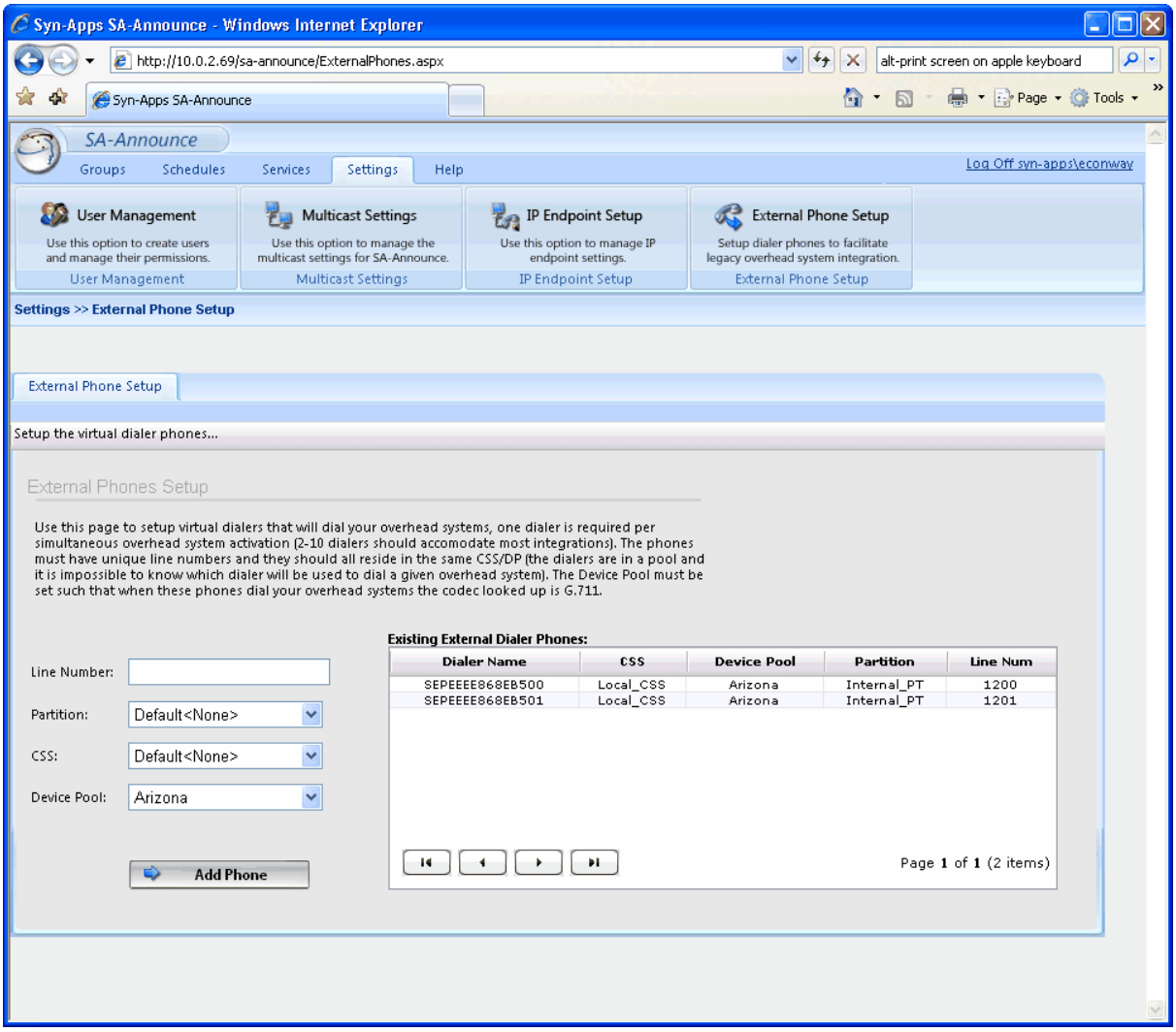
Syn-Apps SA-Announce - Windows Internet Explorer
http://10.0.2.69/sa-announce/ExternalPhones.aspx
alt-print screen on apple keyboard
Syn-Apps SA-Announce
Page
Tools
SA-Announce
Groups
Schedules
Services
Settings
Help
Log Off syn-apps\econway
User Management
Use this option to create users and manage their permissions.
User Management
Multicast Settings
Use this option to manage the multicast settings for SA-Announce.
Multicast Settings
IP Endpoint Setup
Use this option to manage IP endpoint settings.
IP Endpoint Setup
External Phone Setup
Setup dialer phones to facilitate legacy overhead system integration.
External Phone Setup
Settings >> External Phone Setup
External Phone Setup
Setup the virtual dialer phones...
External Phones Setup
Use this page to setup virtual dialers that will dial your overhead systems, one dialer is required per simultaneous overhead system activation (2-10 dialers should accomodate most integrations). The phones must have unique line numbers and they should all reside in the same CSS/DP (the dialers are in a pool and it is impossible to know which dialer will be used to dial a given overhead system). The Device Pool must be set such that when these phones dial your overhead systems the codec looked up is G.711.
Existing External Dialer Phones:
Dialer Name
CSS
Device Pool
Partition
Line Num
SEPEEEE868EB500
Local_CSS
Arizona
Internal_PT
1200
SEPEEEE868EB501
Local_CSS
Arizona
Internal_PT
1201
Page 1 of 1 (2 items)
Line Number:
Partition:
Default<None>
CSS:
Default<None>
Device Pool:
Arizona
Add Phone

Note: To delete a dialer phone use the table on the **Settings>>External Phone Setup** page to gather the MAC addresses or Line Numbers of the Phones. Then use CUCM administration to search out and delete the phones and lines in question.

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26.1 Supported Analog Systems

SA-Announce supports all analog paging systems that integrate to Communications Manager.

If you can dial your paging system from an IP phone, SA-Announce will be able to access the system. SA-Announce supports single and multi zone systems.

26.2 Supported Analog Interfaces

SA-Announce can connect to paging systems that are integrated with FXS, FXO, E&M interfaces hosted and ISR gateways, VG224, VG248, and ATA's.

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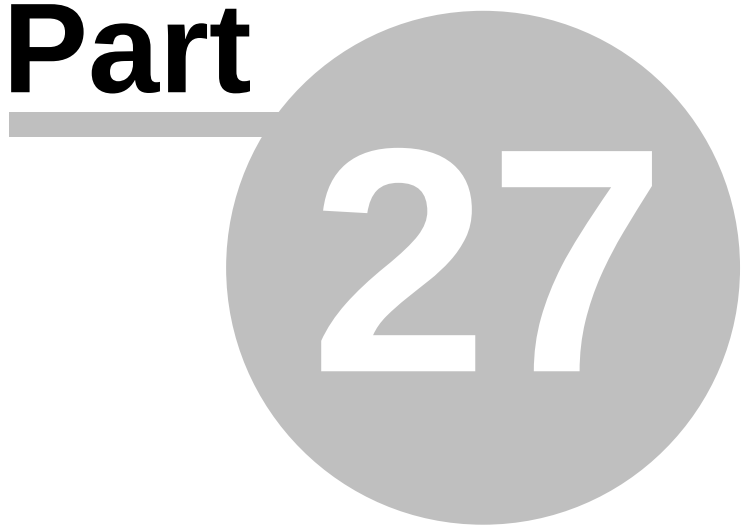
Busy Detection Options



27 Busy Detection Options

27.1 XML Busy Detection

XML Busy Detection is the default method SA-Announce uses to determine whether a phone is busy or idle.

All Cisco IP phones have a priority scheme that allows Syn-Apps to send phones commands that will only be executed if the phone is idle.

All standard page groups will respect your busy status and will not interrupt active phone calls with a page unless the emergency checkbox is checked.

27.2 TAPI Busy Detection

TAPI is necessary in some implementations where many phone lines are shared. Please contact Syn-Apps Technical Support for additional information.

First, download the latest **Cisco TAPI Service Provider** (**TSP**) from the Communication Manager **Plugins url** located in **Applications>Install Plugins**.

Once you have downloaded and run the installation, you will need to configure the TSP.

Procedure for 2003 / 2008

Step 1 Open the Control Panel.

Step 2 Double-click **Phone and Modem Options**.

Step 3 Choose the Cisco TSP that you want to configure.

Step 4 Click **Configure**.

The system displays the Cisco IP PBX Service Provider dialog box.

Step 5 Enter the appropriate settings as described in "Cisco TSP Configuration Settings" section.

Step 6 Click **OK** to save changes.

Cisco TSP Configuration Settings

The following sections describe the fields in the Cisco_IP PBX Service Provider dialog box:

- General Tab
- User Tab
- CTI Manager Tab

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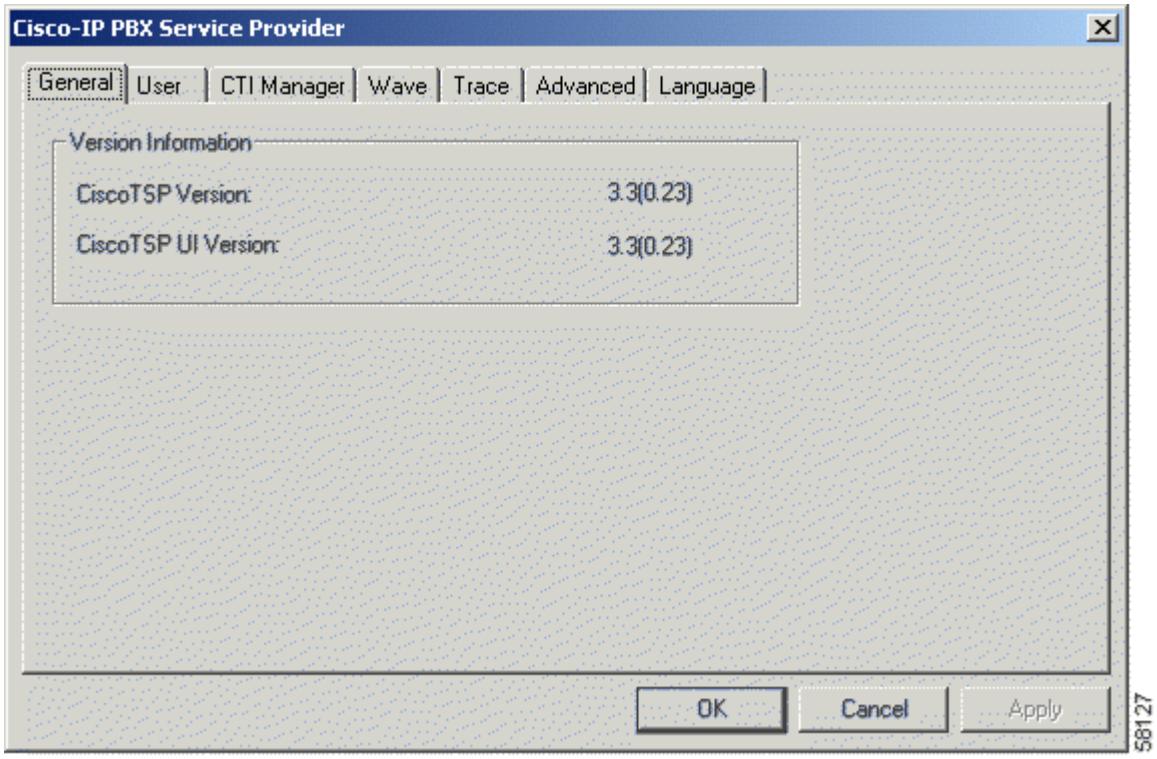
General Tab

The General Tab displays TSP and TSPUI version information, as illustrated in Figure 1.

Figure 1 Cisco IP PBX Service Provider General Tab



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User Tab

The User tab allows you to configure security information, as illustrated in Figure 2.

Figure 2 Cisco IP PBX Service Provider User Tab

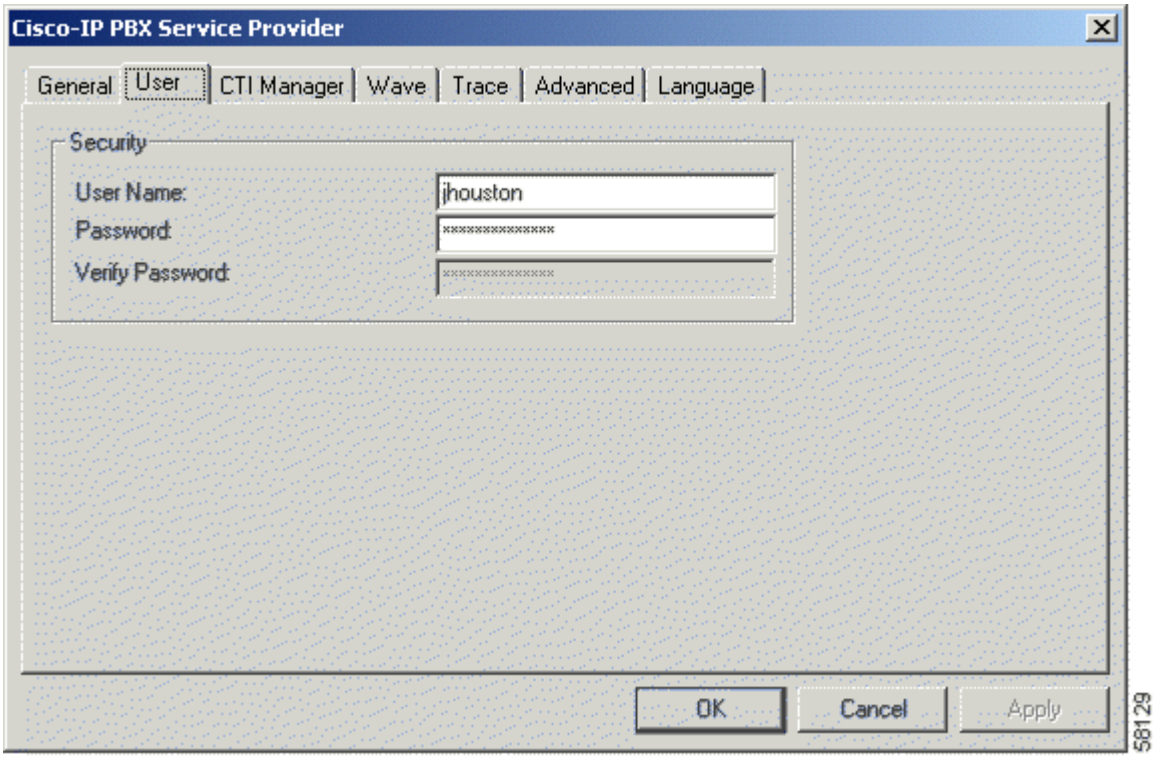

Table 2 contains a list of the fields for the User tab that must be set and their descriptions.

Table 2 User Tab Configuration Fields

Field	Description
User Name	Enter the user name of the user that you want to give access to devices. This TSP can access devices and lines associated with this user. Make sure this user is also configured in the Cisco Communications Manager, so TSP can connect to Cisco Communications Manager. The TSP configuration registry keys store the user name and password that you enter. **Note** You can designate only one user name and password to be active at a time for a TSP so the user will need all devices associated.
Password	Enter the password associated with the user that you entered in the User Name field. The computer encrypts the password and stores it in the registry.
Verify Password	Reenter the user password.

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CTI Manager Tab

The CTI Manager tab allows you to configure primary and secondary CTI Manager information, as illustrated in Figure 3.

Figure 3 Cisco-IP PBX Service Provider CTI Manager Tab

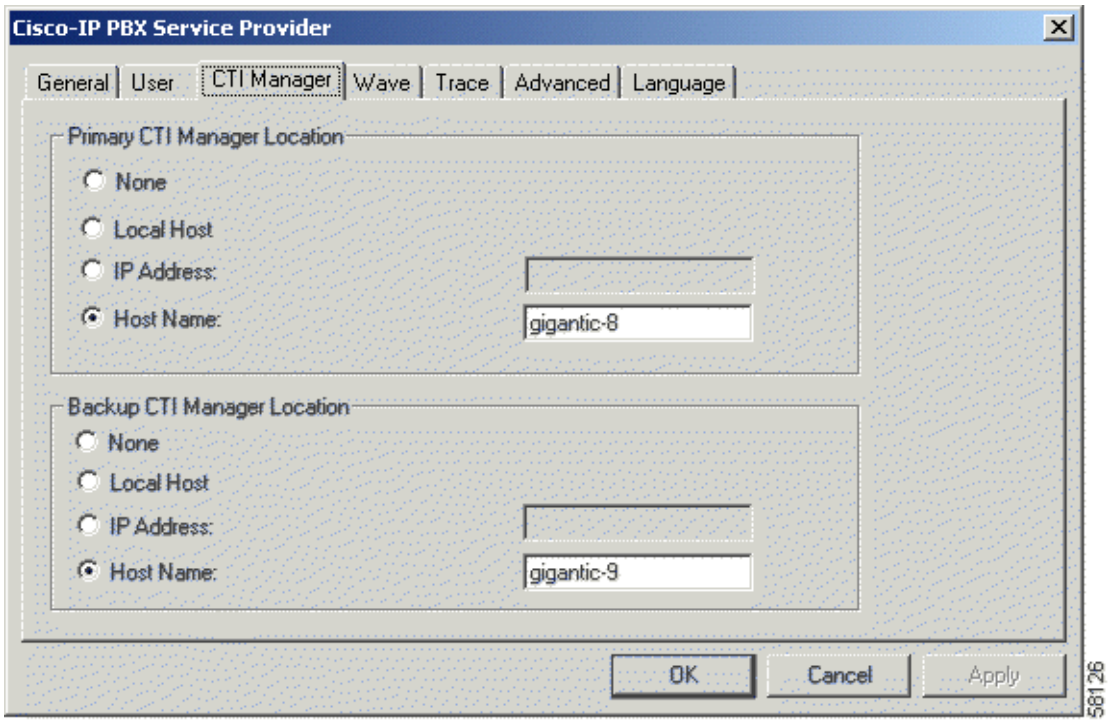

Table 3 contains a list of the CTI Manager tab fields that must be set and their descriptions.

Table 3 CTI Manager Configuration Fields

Field	Description
Primary CTI Manager Location	Specifies the CTI Manager to which the TSP attempts to connect first. If the TSP is on the same computer as the primary CTI Manager, choose the Local Host radio button. If the primary CTI Manager is on a different computer, choose the IP Address radio button and enter the IP address of primary CTI Manager or choose the Host Name radio button and enter the host name of primary CTI Manager.
Backup CTI Manager Location	Specifies the CTI Manager to which the TSP attempts to connect if a connection to the primary CTI Manager fails. If the TSP is on the same computer as the backup CTI Manager, choose the Local Host radio button. If the backup CTI Manager is on a different computer, choose the IP Address radio button and enter the IP address of backup CTI Manager or choose the Host Name radio button and enter the host name of backup CTI Manager.

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Communications Manager – Create the TSP User

Next, create the TSP user in Communications Manager. Complete these steps:

Select **User > Add a New User** from the Cisco Communications Manager Administration web interface . If you are using Communications Manager version 5, 6 or 7 browse to **User Management > Application User** to add a new application user. Also note that on CUCM version 5, 6 and 7 the user will need to have all CTI permissions associated to it.

System Route Plan Service Feature Device User Application Help
Add a New User
Access Rights
Cisco CallManager Administrat
For Cisco IP Telephony Solutions
Cisco Systems
Cisco CallManager 4.0 Administration
Details
Copyright © 1999 - 2003 Cisco Systems, Inc.
All rights reserved.

Enter the user information as required on the Add a New User page, and click Insert when you are finished. Make sure you enable CTI Application Use for your new user.

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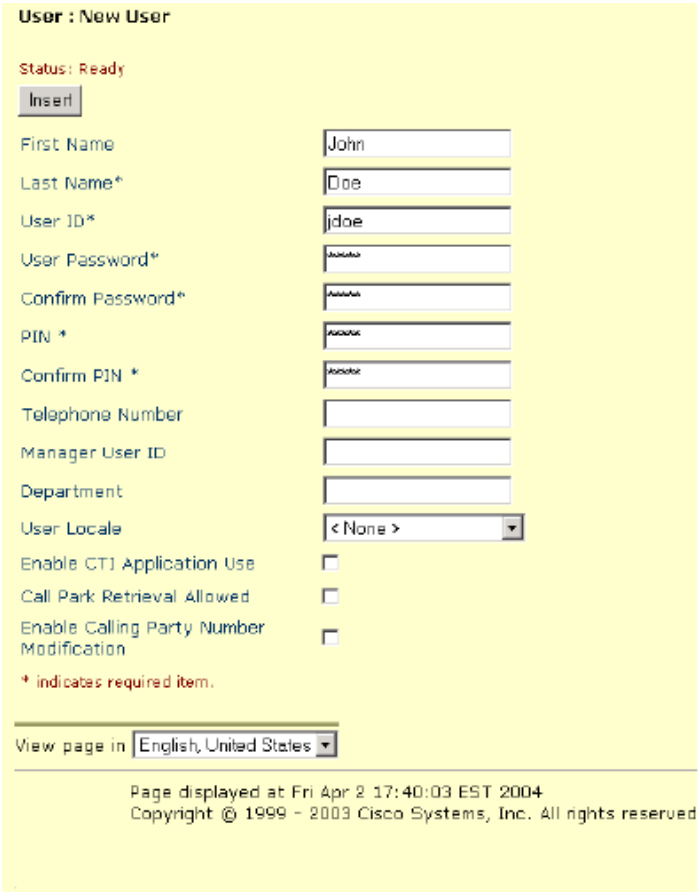

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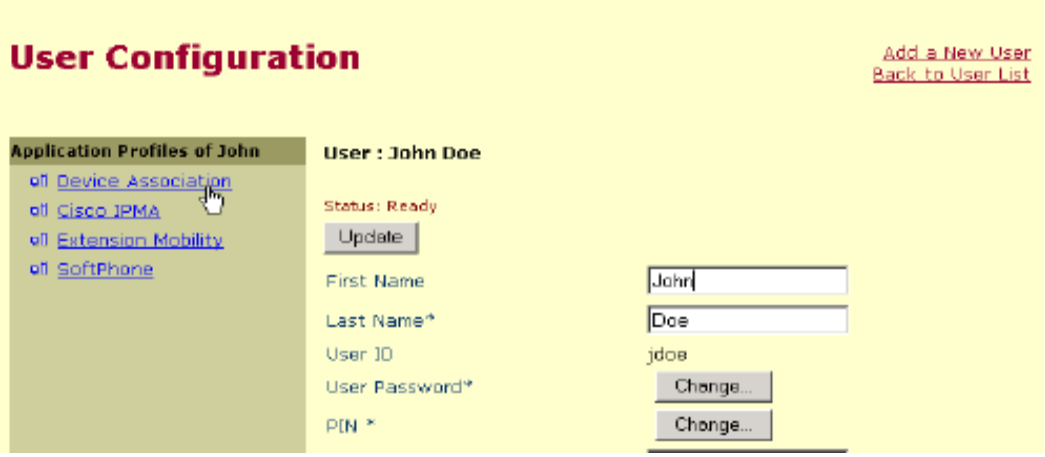
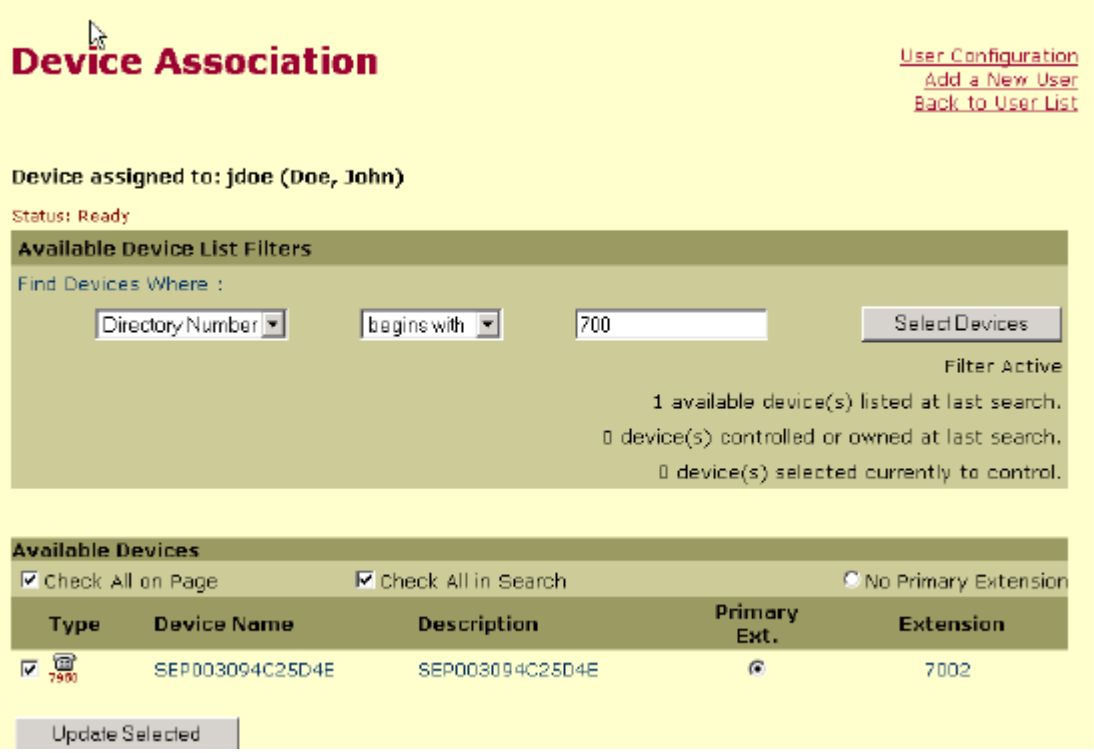
User Configuration

Click **Device Association**.



The following page appears.

Associate all IP phones to the TSP user. Do not select Gateways or Analog Ports.



When you are finished, click **Update Selected**.

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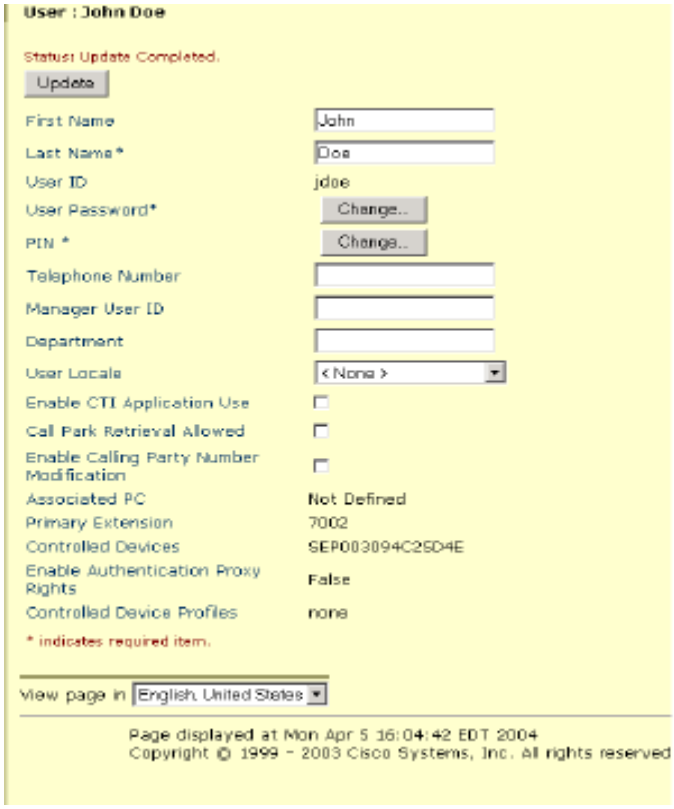
Controlled Devices

You should see a screen similar to the following. The **Controlled Devices** field reflects the association that you just made.

Note: The controlled device is the phone itself, not the DNs.



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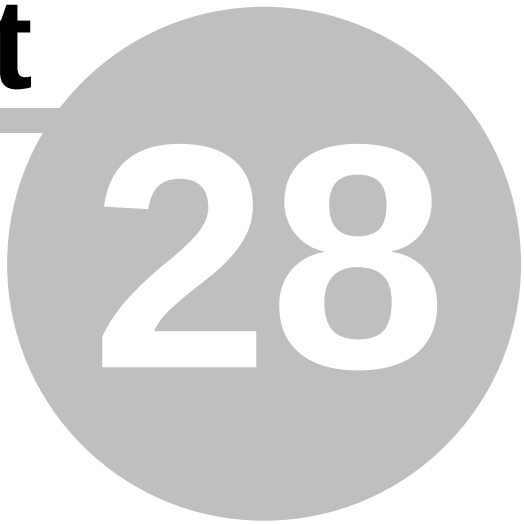
Information Center



28 Information Center

SA-Announce 7.x introduces a new information center that provides quick access to the following items:

- **Changes**: This section provides access to the SA-Announce change log. Please refer to this section to learn about application enhancements and bug fix information.
- **Info**: This section provides access to the application registry key settings. This is useful when Syn-Apps support asks system configuration information. You can also use this section to quickly verify system settings.
- **License**: The License section provides access to the currently installed license information including your maintenance contract number and start/end dates. Licenses can also be updated on this page using the interface at the bottom.
- **Groups**: This section provides a detailed list of all notification groups configured within SA-Announce. Information displayed includes Name, Type, Number, Partition, and Device Pool.
- **Users**: This section displays a list of all users that have been provisioned for access to the SA-Announce web interface. The values displayed are Username and if the user has been provisioned as a global administrator.
- **Login Act**: This section provides a list of all logins to the SA-Announce web interface. Username, Login time and the IP address of the machine that the user logged into the system from are displayed.
- **Page Act**: This section provides a historical view of the notification activity on the system. You will be able to see who called a given notification group on a specific date and time.
- **Text Act**: This section is similar to the Page Act section except that it displays the historical view of all text messages that have been dispatched via SA-Announce.
- **Sched Act**: This section displays the historical view of all scheduled notifications.

All of this information can be accessed by clicking on the Syn-Apps head graphic located in the upper left corner of the administration interface. Once you are done viewing the data please click on the **Exit Menu** button in the lower right corner or simply click on the main SA-Announce web page to close the window.

Please note that all data in the information center is retained for 90 days by default. If you would like to adjust the retention period please modify the following registry key.
Regedit: HKLM>Software>SynApps>SA-Announce>activityRetentionDays (please add the value as a string if it doesn't already exist in the registry).

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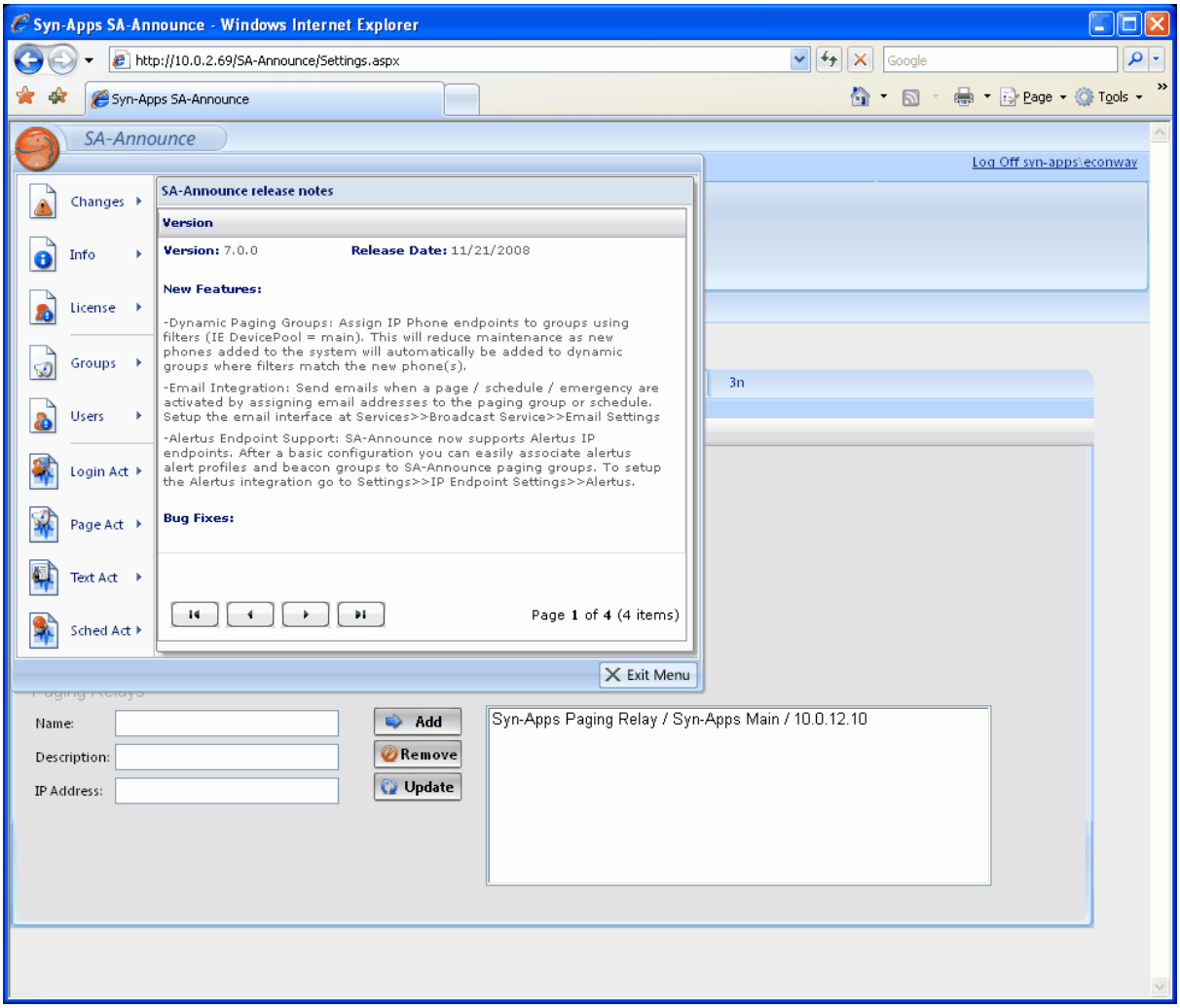
Syn-Apps SA-Announce - Windows Internet Explorer
http://10.0.2.69/SA-Announce/Settings.aspx
Syn-Apps SA-Announce
SA-Announce
Log Off syn-apps\econway
Changes
Info
License
Groups
Users
Login Act
Page Act
Text Act
Sched Act
SA-Announce release notes
Version
Version: 7.0.0
Release Date: 11/21/2008
New Features:
-Dynamic Paging Groups: Assign IP Phone endpoints to groups using filters (IE DevicePool = main). This will reduce maintenance as new phones added to the system will automatically be added to dynamic groups where filters match the new phone(s).
-Email Integration: Send emails when a page / schedule / emergency are activated by assigning email addresses to the paging group or schedule. Setup the email interface at Services>>Broadcast Service>>Email Settings
-Alertus Endpoint Support: SA-Announce now supports Alertus IP endpoints. After a basic configuration you can easily associate alertus alert profiles and beacon groups to SA-Announce paging groups. To setup the Alertus integration go to Settings>>IP Endpoint Settings>>Alertus.
Bug Fixes:
Page 1 of 4 (4 items)
Exit Menu
Name:
Description:
IP Address:
Add
Remove
Update
Syn-Apps Paging Relay / Syn-Apps Main / 10.0.12.10

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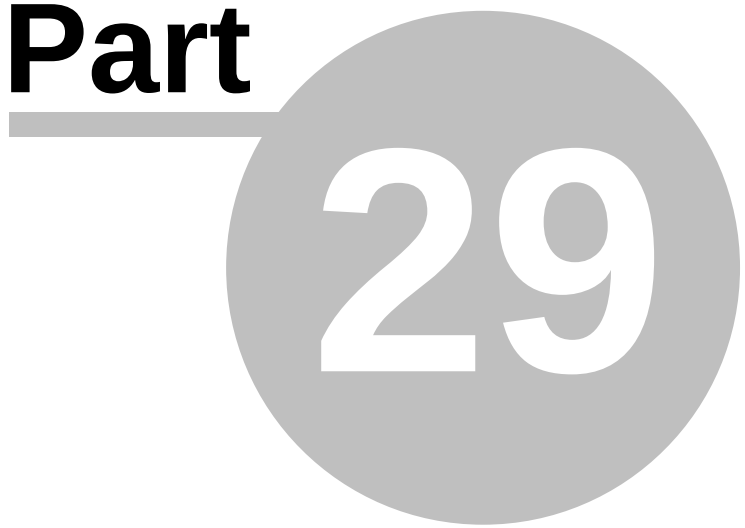
Custom Wave File Upload



29 Custom Wave File Upload

Schedules>>Wav File Upload

It is possible to add custom wave files to the SA-Announce notification system, for use with schedules and emergency alert group types. Browse to the **Schedules>>Wav File Upload** page to upload new wave files to the system.

Recording a custom wav file:
For your new audio prompt to be compatible with SA-Announce RTP, it needs to be in the following format:

- g.711
- CCIT u-Law
- 8k - 8bit, mono

You can use the sound recorder bundled with windows or record a message with Unity Voice Mail.

To use Windows Sound Recorder:
Launch Sound Recorder (Start\Programs\Accessories\Entertainment\Sound Recorder)

- **ALWAYS** press **New** before recording; otherwise it will append the existing file
- Record the sound
- File/Save as/ Format Change: CCIT u-Law, 8k, 8bit, mono

To add the new wave file(s) to the system:

- Browse to **Schedules>>Wav File Upload**
- Press the **Browse** button to add a file to upload.
- Add more files to upload using the **Add File** button.
- Press the **Upload** button to complete the process and upload the wave file(s) to the system.

The newly added wave files are now available for association to emergency alert groups and schedules.

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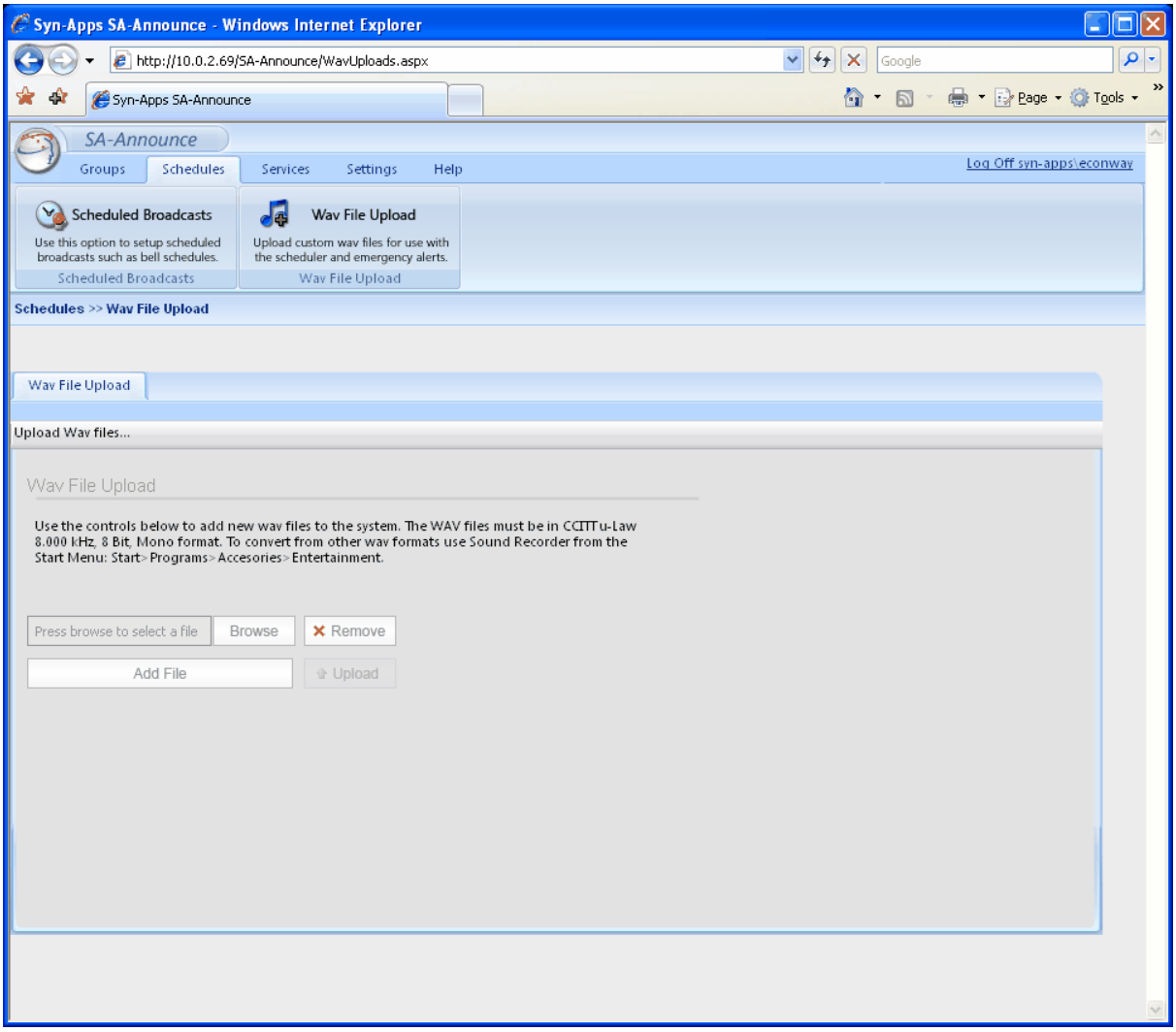
Syn-Apps SA-Announce - Windows Internet Explorer
http://10.0.2.69/SA-Announce/WavUploads.aspx
Google
Syn-Apps SA-Announce
Page
Tools
SA-Announce
Groups
Schedules
Services
Settings
Help
Log Off syn-apps\econway
Scheduled Broadcasts
Use this option to setup scheduled broadcasts such as bell schedules.
Scheduled Broadcasts
Wav File Upload
Upload custom wav files for use with the scheduler and emergency alerts.
Wav File Upload
Schedules >> Wav File Upload
Wav File Upload
Upload Wav files...
Wav File Upload
Use the controls below to add new wav files to the system. The WAV files must be in CCITT u-Law 8.000 kHz, 8 Bit, Mono format. To convert from other wav formats use Sound Recorder from the Start Menu: Start> Programs> Accesories> Entertainment.
Press browse to select a file
Browse
Remove
Add File
Upload

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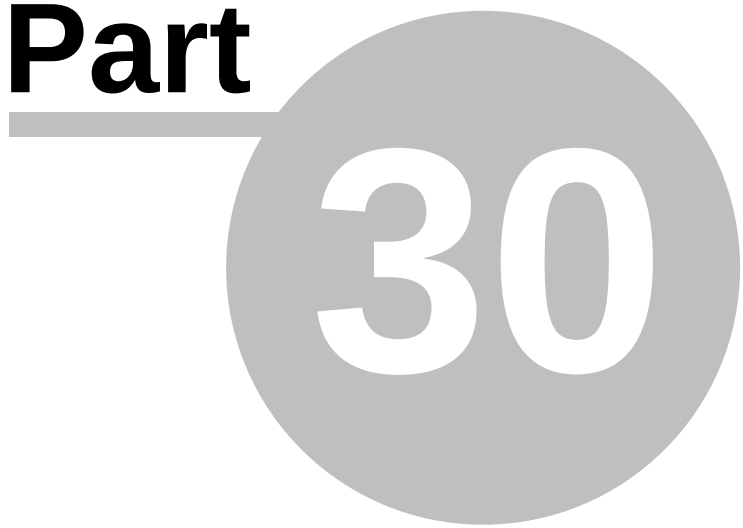
Customizing Audio Feedback



30 Customizing Audio Feedback

You can customize SA-Announce audio prompts by modifying the wave files included with SA-Announce. The prompts you hear when dialing a SA-Announce notification group can be found on the SA-Announce application server at C:\programn files\Syn-Apps\SA-Announce\Broadcaster\Wav directory. A brief description of each of the files is contained in the next section Audio File Descriptions .

[See the chapter Custom Wave File Upload to add custom wave files for use with emergency alert groups and schedules]

SA-Announce 2.0 Voice Prompts

Recording a wav file:
For your new audio prompt to be compatible with SA-Announce RTP, it needs to be in the following format:

- g.711
- CCIT u-Law
- 8k - 8bit, mono

You can use the sound recorder bundled with windows or record a message with Unity Voice Mail.

To use Windows Sound Recorder:
Launch Sound Recorder (Start\Programs\Accessories\Entertainment\Sound Recorder)

- **ALWAYS** press **New** before recording; otherwise it will append the existing file
- Record the sound
- File/Save as/ Format Change: CCIT u-Law, 8k, 8bit, mono

30.1 Audio File Descriptions

AdHoc.wav

When: Played before waiting for target destination numbers.
"You have reached an Ad-Hoc paging group. Please enter the destination extensions, separated by the pound sign. Once you have completed entering your destinations please enter pound again to start your page."

Holler.wav

When: Played before waiting for target destination number.
"You have reached a Hoot-n-Holler page group. Please enter destination extension followed by the pound sign."

HollerError.wav

When: a destination number is invalid.

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"We were unable to open the destination you requested. The destination extension was invalid."

HollerErrorShared.wav:

When: NOT USED. It's a warning, only the first line (undefined) will be opened.
"We were unable to open the extension you requested. The destination is a shared line."

SecurityCode.wav

When: before waiting for the security code.
"This is a secure page group, Please enter the DTMF security code."

SecurityCodeWrong.wav

When: when code is wrong, before hanging up.
"You have entered an incorrect security code, please call back and try again. Goodbye."

SomeDestBusy.wav

When: When so many destinations are busy that a confirmation tone would not otherwise be sent.
"Some destinations are busy…"[Paging Continues].

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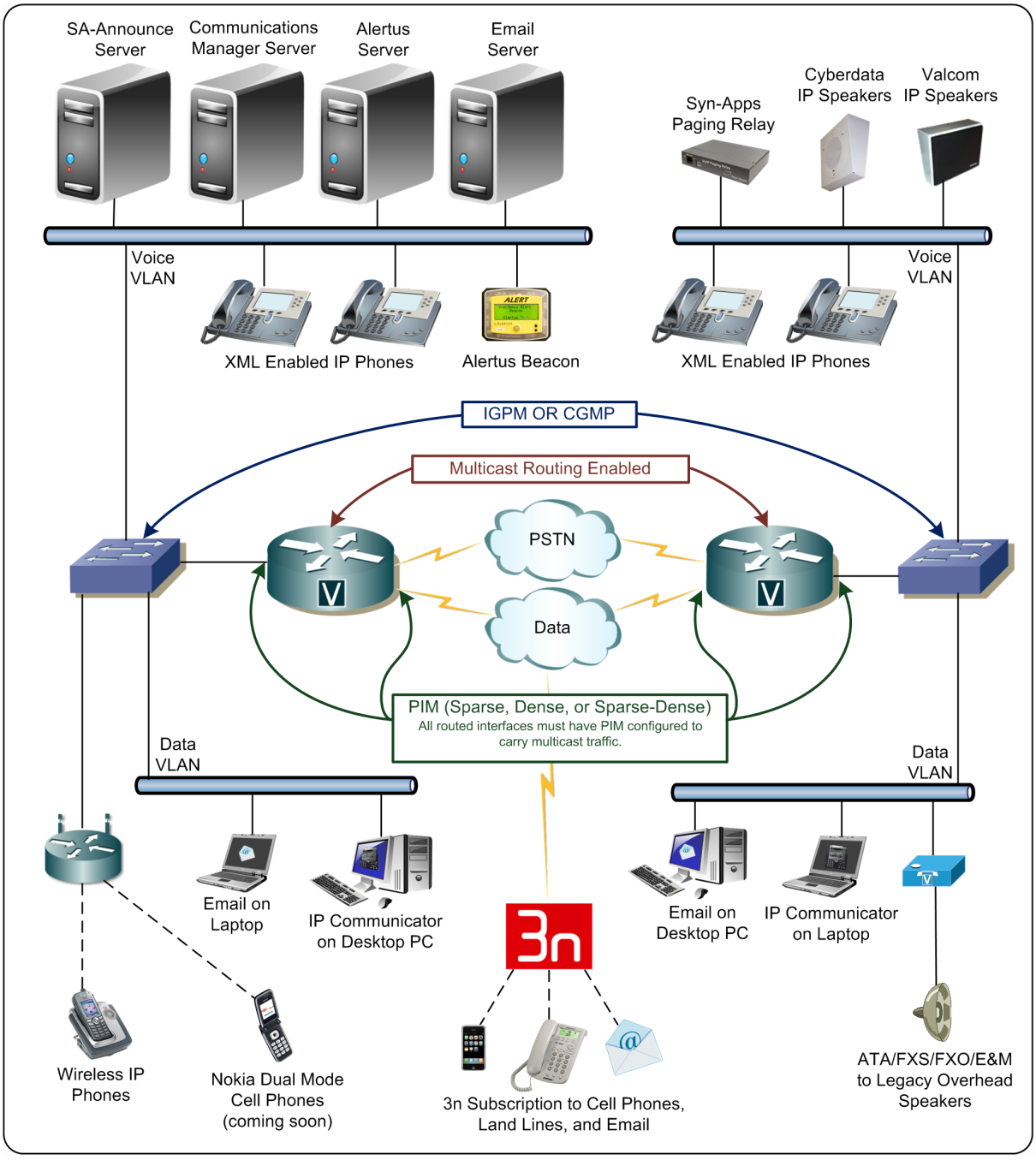
Advanced Paging Configuration

Part 31

31 Advanced Paging Configuration

Enter topic text here.

31.1 SA-Announce Multicast Router/Switch Configuration



Configuring multicast on a network includes enabling Multicast Routing on routers, configuring PIM on routed interfaces, and enabling IGPM or CGPM on switches.

For more information please refer to the **Cisco Multicast Quick- Start Configuration Guide** (http://www.cisco.com/warp/public/105/48.pdf).

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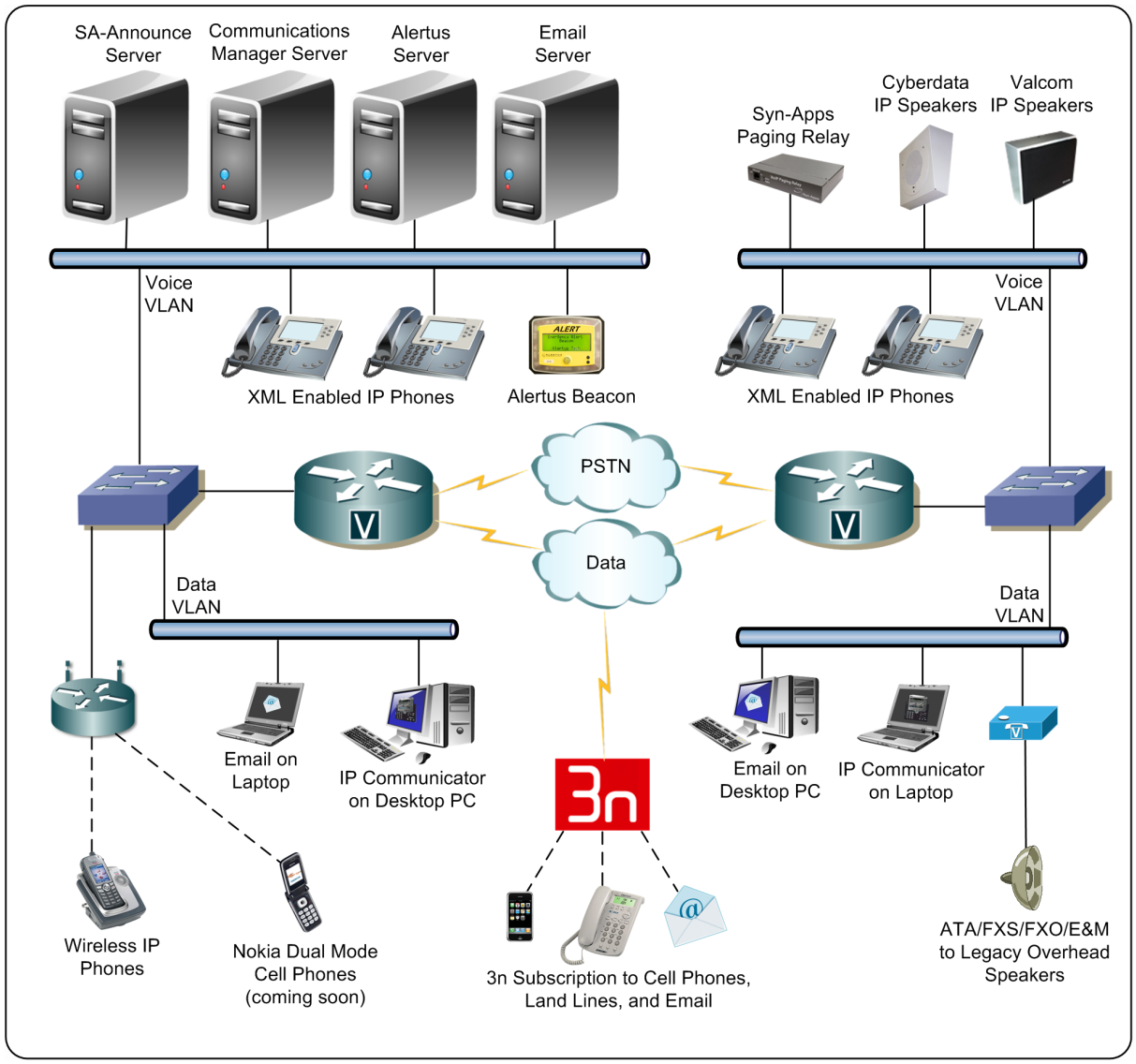
31.2 Multi-Site Centralized SA-Announce Server



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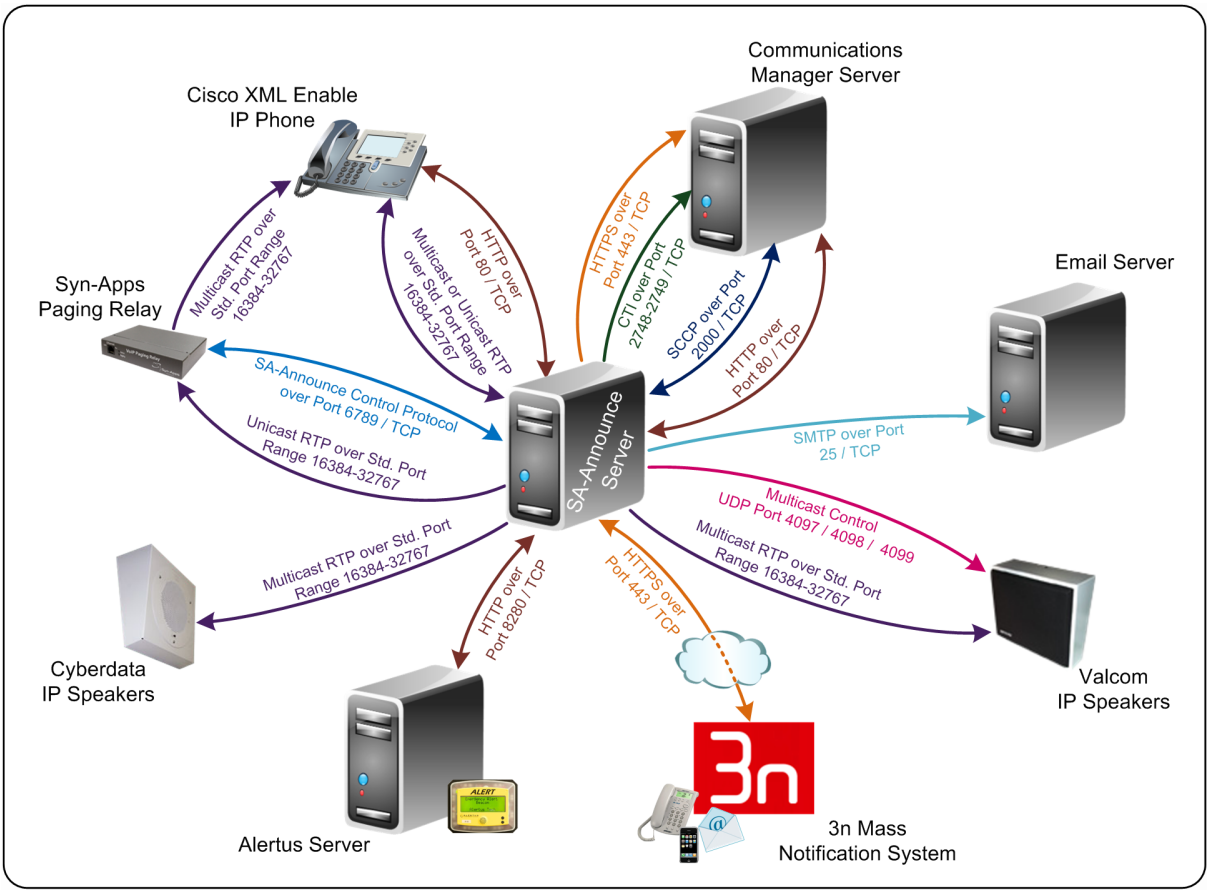
31.3 SA-Announce High-Level Protocol Use


Communications Manager Server
Cisco XML Enable IP Phone
Email Server
Syn-Apps Paging Relay
SA-Announce Server
Cyberdata IP Speakers
Valcom IP Speakers
Alertus Server
3n Mass Notification System
Multicast RTP over Std. Port Range 16384-32767
HTTP over Port 80 / TCP
Multicast or Unicast RTP over Std. Port Range 16384-32767
HTTPS over Port 443 / TCP
CTI over Port 2748-2749 / TCP
SCCP over Port 2000 / TCP
HTTP over Port 80 / TCP
SA-Announce Control Protocol over Port 6789 / TCP
Unicast RTP over Std. Port Range 16384-32767
SMTP over Port 25 / TCP
Multicast Control UDP Port 4097 / 4098 / 4099
Multicast RTP over Std. Port Range 16384-32767
Multicast RTP over Std. Port Range 16384-32767
HTTP over Port 8280 / TCP
HTTPS over Port 443 / TCP

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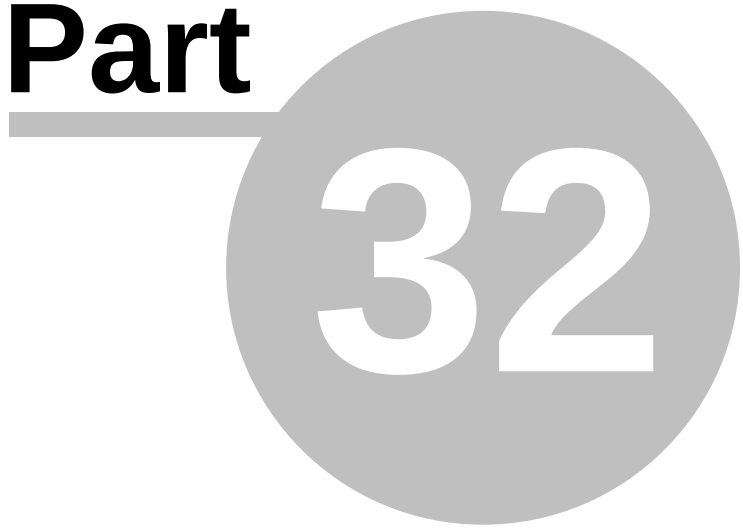
Help and Support

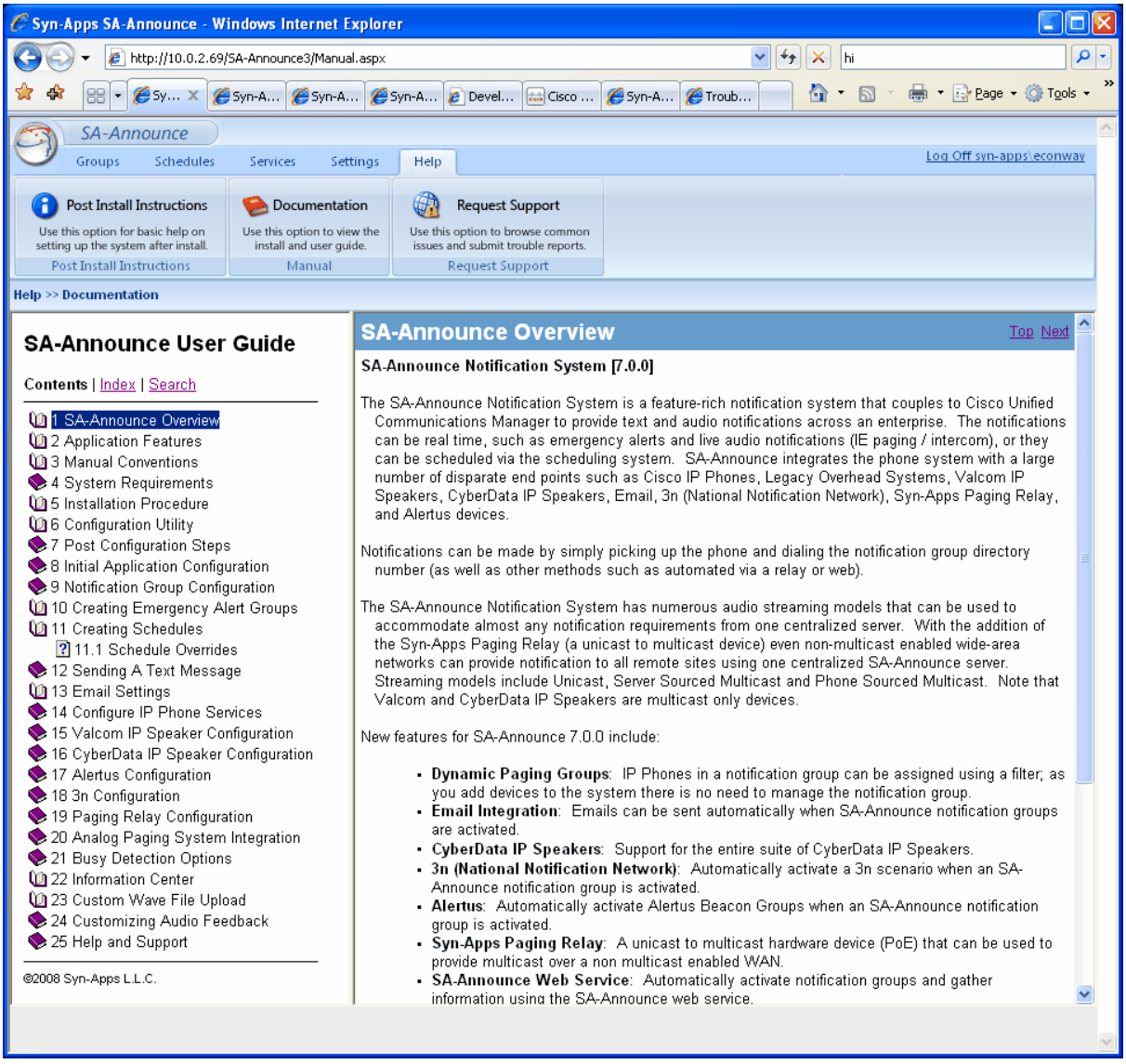


32 Help and Support

32.1 Documentation

Help>>Documentation

The **Help>>Documentation** page contains the SA-Announce User Guide in HTML format, complete with index and search functions.


Syn-Apps SA-Announce - Windows Internet Explorer
http://10.0.2.69/SA-Announce3/Manual.aspx
SA-Announce
Groups
Schedules
Services
Settings
Help
Log Off syn-apps\econway
Post Install Instructions
Use this option for basic help on setting up the system after install.
Post Install Instructions
Documentation
Use this option to view the install and user guide.
Manual
Request Support
Use this option to browse common issues and submit trouble reports.
Request Support
Help >> Documentation
SA-Announce User Guide
Contents | Index | Search
1 SA-Announce Overview
2 Application Features
3 Manual Conventions
4 System Requirements
5 Installation Procedure
6 Configuration Utility
7 Post Configuration Steps
8 Initial Application Configuration
9 Notification Group Configuration
10 Creating Emergency Alert Groups
11 Creating Schedules
11.1 Schedule Overrides
12 Sending A Text Message
13 Email Settings
14 Configure IP Phone Services
15 Valcom IP Speaker Configuration
16 CyberData IP Speaker Configuration
17 Alertus Configuration
18 3n Configuration
19 Paging Relay Configuration
20 Analog Paging System Integration
21 Busy Detection Options
22 Information Center
23 Custom Wave File Upload
24 Customizing Audio Feedback
25 Help and Support
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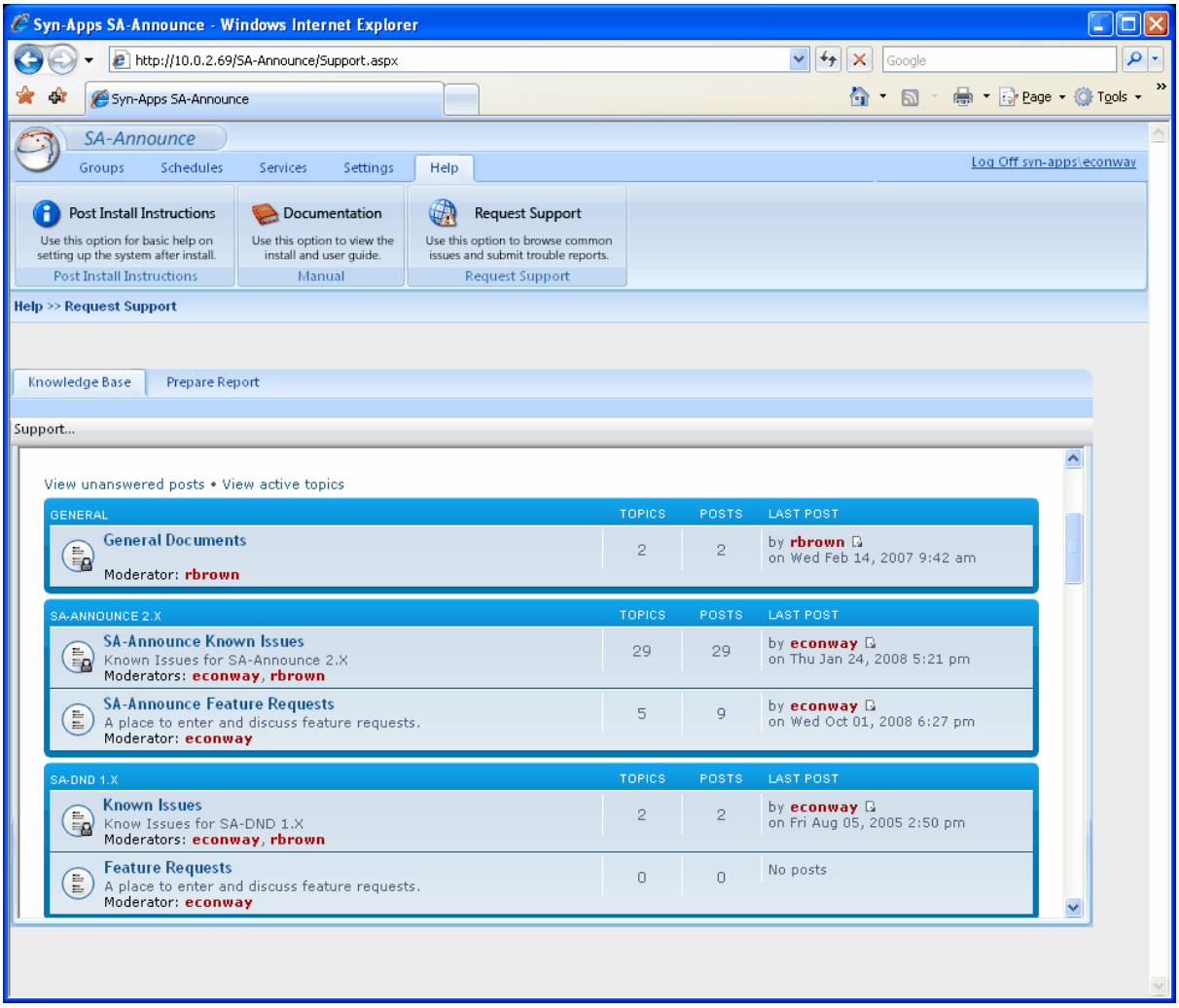
SA-Announce Overview
Top Next
SA-Announce Notification System [7.0.0]
The SA-Announce Notification System is a feature-rich notification system that couples to Cisco Unified Communications Manager to provide text and audio notifications across an enterprise. The notifications can be real time, such as emergency alerts and live audio notifications (IE paging / intercom), or they can be scheduled via the scheduling system. SA-Announce integrates the phone system with a large number of disparate end points such as Cisco IP Phones, Legacy Overhead Systems, Valcom IP Speakers, CyberData IP Speakers, Email, 3n (National Notification Network), Syn-Apps Paging Relay, and Alertus devices.
Notifications can be made by simply picking up the phone and dialing the notification group directory number (as well as other methods such as automated via a relay or web).
The SA-Announce Notification System has numerous audio streaming models that can be used to accommodate almost any notification requirements from one centralized server. With the addition of the Syn-Apps Paging Relay (a unicast to multicast device) even non-multicast enabled wide-area networks can provide notification to all remote sites using one centralized SA-Announce server. Streaming models include Unicast, Server Sourced Multicast and Phone Sourced Multicast. Note that Valcom and CyberData IP Speakers are multicast only devices.
New features for SA-Announce 7.0.0 include:
Dynamic Paging Groups: IP Phones in a notification group can be assigned using a filter; as you add devices to the system there is no need to manage the notification group.
Email Integration: Emails can be sent automatically when SA-Announce notification groups are activated.
CyberData IP Speakers: Support for the entire suite of CyberData IP Speakers.
3n (National Notification Network): Automatically activate a 3n scenario when an SA-Announce notification group is activated.
Alertus: Automatically activate Alertus Beacon Groups when an SA-Announce notification group is activated.
Syn-Apps Paging Relay: A unicast to multicast hardware device (PoE) that can be used to provide multicast over a non multicast enabled WAN.
SA-Announce Web Service: Automatically activate notification groups and gather information using the SA-Announce web service.

32.2 Knowledge Base

Help>>Request Support: Knowledge Base

The Request Support page contains a Knowledge Base tab that can be used to look at known issues and to add feature requests. Please consult the knowledge base for solutions to known problem before proceeding to the Prepare Report tab to enter a new trouble ticket.



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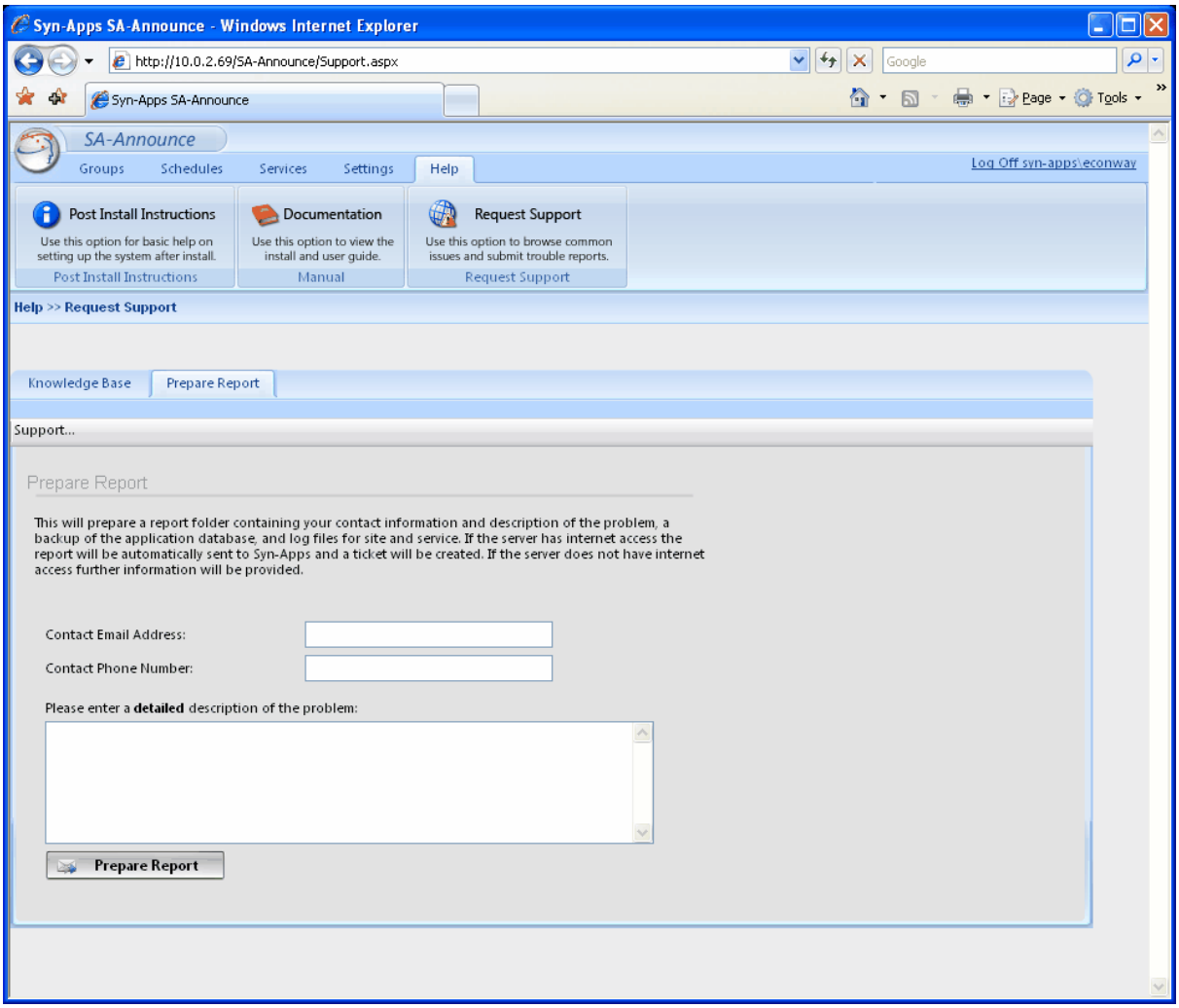
32.3 Prepare Report

Help>>Request Support: Prepare Report

The Request Support page contains a Prepare Report tab that can be used to generate a Syn-Apps support request. This is the preferred method of obtaining support as all log files will be automatically sent to Syn-Apps Support and a trouble ticket will be created. FTP and email access is required for the process to work fully automatically (See Email Settings to setup the email system before requesting support).

To request support please fill out the following information in the interface provided on the page:

- **Contact Email Address**: Enter the email address of the person Syn-Apps Support should contact in response to this trouble ticket.
- **Contact Phone Number**: Enter the phone number of the person Syn-Apps Support should contact in response to this trouble ticket.
- **Description**: Enter a **detailed** description of the problem in the provided text box, provide as much detail as possible as to how the problem is occurring.


Syn-Apps SA-Announce - Windows Internet Explorer
http://10.0.2.69/SA-Announce/Support.aspx
Syn-Apps SA-Announce
SA-Announce
Groups
Schedules
Services
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Use this option for basic help on setting up the system after install.
Post Install Instructions
Documentation
Use this option to view the install and user guide.
Manual
Request Support
Use this option to browse common issues and submit trouble reports.
Request Support
Help >> Request Support
Knowledge Base
Prepare Report
Support...
Prepare Report
This will prepare a report folder containing your contact information and description of the problem, a backup of the application database, and log files for site and service. If the server has internet access the report will be automatically sent to Syn-Apps and a ticket will be created. If the server does not have internet access further information will be provided.
Contact Email Address:
Contact Phone Number:
Please enter a detailed description of the problem:
Prepare Report

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32.4 Contact Syn-Apps Support

Please feel free to contact **Technical Support** directly with any issues you may have.

support@syn-apps.com or 866-664-6071, option 2.

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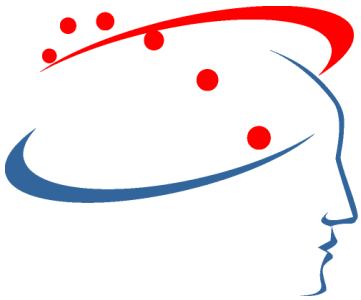

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